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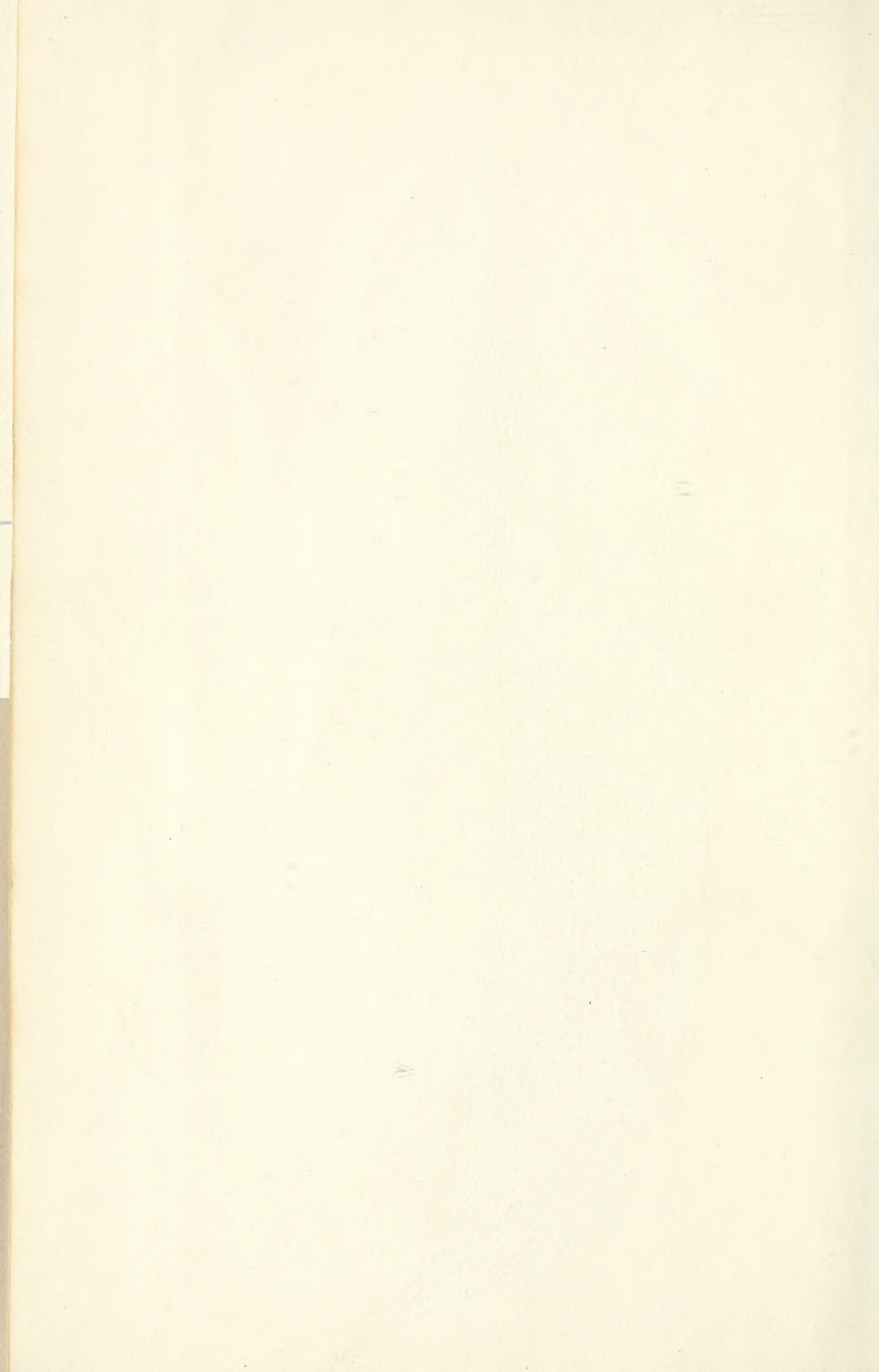


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HEALTH EDUCATION



Issued by the
STATE SUPERINTENDENT OF PUBLIC INSTRUCTION
RALEIGH, NORTH CAROLINA

THE EDUCATED PERSON—

- I understands the basic facts concerning health and disease.
- I protects his own health and that of his dependents.
- I works to improve the health of the community.

—The Purposes of Education in American Democracy.
Educational Policies Commission.

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FOREWORD

Under our present system of public education, the learning process involves pupil contact with a number of general subject areas—language arts, social studies, science, mathematics, etc. Using these various subjects, the teacher leads the child into an understanding of some of the knowledge accumulated through the ages, and how man uses this knowledge for his benefit and happiness.

In order to secure the maximum return on life's expectancy, man must also learn something about himself and some of the ways by which he may better fit himself mentally and physically for a long and useful life. The subject area from which man gains this knowledge is classified as health; or when used in a learning process, as health education.

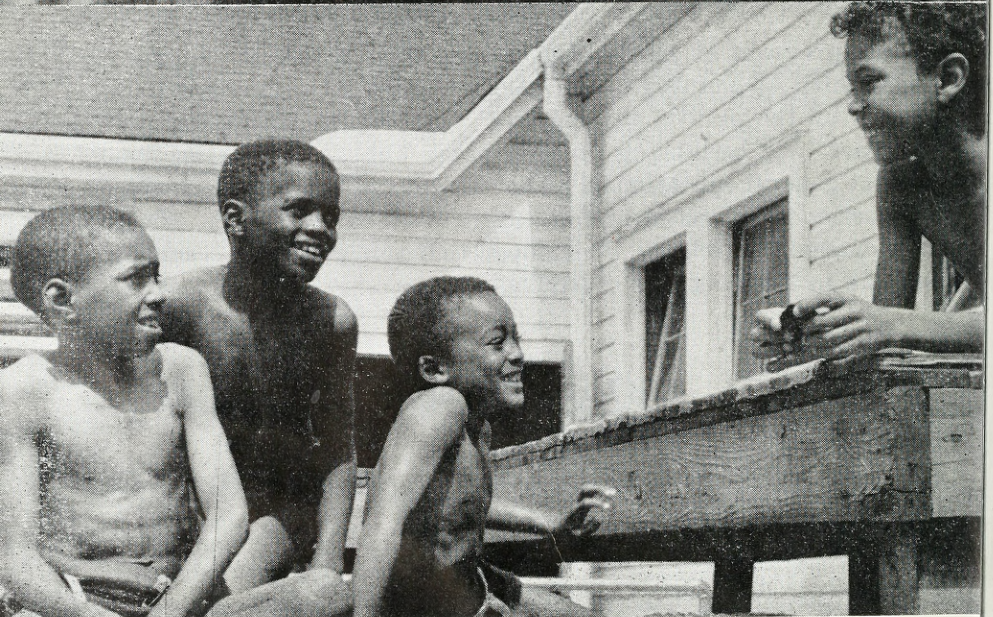
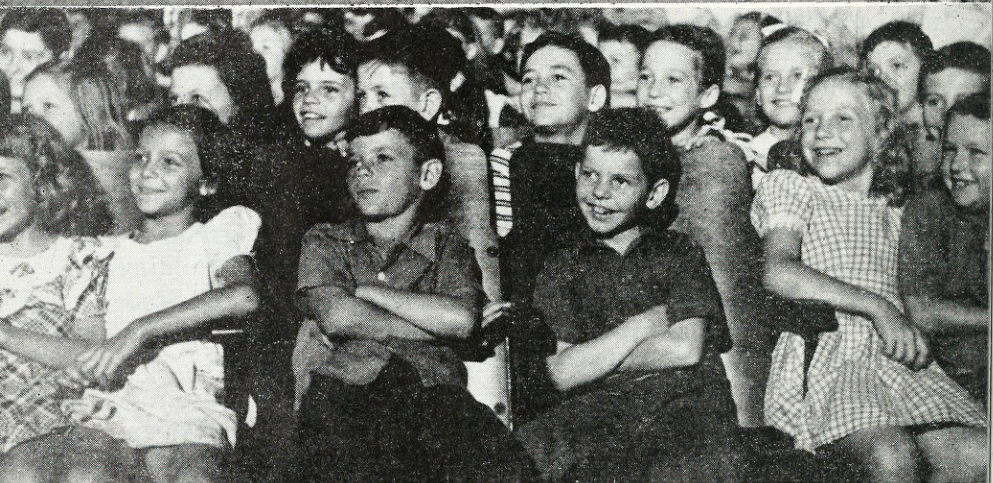
This particular publication is prepared as a guide in further stimulating and improving our health education program. It is the product of a joint and cooperative "Curriculum Building Project" involving school and health personnel at both the State and local level. We are indebted to Charles E. Spencer, Director School Health and Physical Education and Co-director of the School Health Coordinating Service, for leadership in the preparation of this guide. To him, to his staff, and to all other agencies and committees whom he has mentioned in "Acknowledgements," I wish to express my grateful appreciation.

This program of Health Education offers many fine suggestions which, if adapted to the varying needs of individuals and groups by the skillful teacher, will not only contribute to the happiness and well-being of each pupil, but also will raise the level of general education of all the citizens of the State. Health instruction as a precedent for healthful living is vital to school and community welfare. It is hoped that this guide for teachers will aid in fulfilling this objective.

Chas. F. Carroll

State Superintendent of Public Instruction

July 1, 1953.



Children's expressions and their reactions to situations tell a great deal about them

ACKNOWLEDGMENTS

This publication was developed cooperatively by pupils, teachers, principals, superintendents, supervisors, college and university personnel, staff members of local health departments, and representatives of the State Board of Health and the State Department of Public Instruction. It is the result of the work of State and local committees as well as a number of individuals not named to committees.

The original State Curriculum Committee composed of 120 persons was appointed by the late Dr. Clyde A. Erwin, State Superintendent of Public Instruction, in 1948. This Committee launched a Statewide "Curriculum Building and Improvement Project in Health, Physical Education and Safety," designed—

1. To stimulate local groups to carry on curriculum building and improvement projects in health, physical education and safety.
2. To provide opportunities for in-service education for group leaders throughout the State and for a few local groups.
3. To prepare a publication on physical education, health and safety.

Implementation of these purposes was forwarded by the appointment of a State Steering Committee, local committees, and sub-committees. The State Steering Committee included the following: Charles E. Spencer, Mrs. Ruth Moore Davis¹, and Mrs. Annie Ray Moore, all of the Division of School Health Coordinating Service; and John L. Cameron² and John C. Noe of the Division of Instructional Service.

As the work on the project advanced in its several phases, it was decided to issue two publications—(1) physical education, and (2) health education and safety—instead of one as originally planned. The first of these two publications was issued in 1952 as publication No. 279, *Physical Education in the Elementary and Secondary Schools*. The present publication is the printed aspect of the second part of this project.

The materials comprising this bulletin have been developed as an outgrowth of many conferences, actual classroom use, and out of the experiences of those engaged in school health programs. The State Curriculum Committee prepared tentative materials which were edited by the Steering Committee and sent to local superintendents, supervisors and health departments for study and use in local programs. Suggestions for changes were re-

¹New with the Charlotte City Schools.

²Served until he became Director of the Division of School Planning.

turned to the Steering Committee. These suggestions were used by this Committee in the preparation of the final draft of the material. It represents, therefore, the thinking and practice of many persons. To all of these, to the 52 members of the State Curriculum Committee who comprised the health education committee as listed below, and to all other committees and sub-committees, we make acknowledgments.

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*No longer in that capacity.

³Now—Mrs. Lemuel Van McMahan, Murphy.

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CHARLES E. SPENCER. *Director
School Health and Physical Edu-
cation and Co-Director School
Health Co-ordinating Service.*

July 1, 1953.

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ORGANIZATION AND ADMINISTRATION

INTRODUCTION

School health education involves all of the learning experiences in the various school situations which favorably influence health knowledge, attitudes, and habits. Therefore, the program should be organized and administered as an integral part of the total school program. The degree to which the school health program functions effectively is dependent upon the sum total of the efforts of administrators, supervisors, teachers, health department personnel and other resource agencies and persons concerned. Like character education, health education is a responsibility of every one connected with the school.

In the organization and administration of the school health program, the administrator can best carry out his responsibilities by planning with others—democratically, jointly, and cooperatively—but in the final analysis the responsibility for getting a job done in the schools rests with the superintendent.

The purpose of organization and administration of school health is to make it easier for students to live healthfully and to learn effectively.

ESSENTIALS IN ORGANIZATION AND ADMINISTRATION

In a well organized and well administered school health program, such as this health education bulletin advocates, the following elements are significant:

- “1. A clear concept of health and its relation to the educative process on the part of the school administrator.
- “2. Recognition on the part of the entire school staff of the opportunity and responsibility of the school in relation to health.
- “3. An understanding by those who lead and direct the program of what constitutes a comprehensive school health program and of the scope and work of each component.
- “4. An understanding by the school staff of the objectives of health education and of the responsibility of the school in reaching those objectives.

- "5. Proper coordination of the several components of the health program to secure the best functioning of each unit and maximum effectiveness for the complete program.
- "6. Coordinate placement of health education with other important aspects of education in the administrative setup of the school or school system.
- "7. Selection of special staff members for health responsibilities with due consideration for the adequacy of their training and other health qualifications.
- "8. Adequate facilities and suitable allotments for health work in the school's time schedule.
- "9. Definite assignment of work and duties to each staff member.
- "10. Assumption by every member of the school staff of his proper responsibilities and duties.
- "11. Adequate financial support for salaries, equipment, and supplies.
- "12. Basic policies, definitely established, to assure smooth running and maximum achievement in attaining the aims.
- "13. Effective coordination of school and community health programs."¹

SOME GUIDING PRINCIPLES FOR PLANNING AND CONDUCTING THE SCHOOL HEALTH PROGRAM.

How Important is Health?

The most recent and most widely accepted definition of health by the World Health Organization points out how the majority of the nations feel about the importance of health. This relatively new definition of health, which is stated below as the first "Guiding Principle", points up the important place health education should have in the total school program. Our interpretation of and belief in the principles outlined below will set the stage for the most desirable type of health education program in the schools of North Carolina:

1. "Health is a state of complete physical, mental, and social well-being and not just the absence of disease or infirmity."²

¹Health in Schools. Twentieth Yearbook, Revised Edition. Washington, D. C.: American Association of School Administrators, 1951, PP 23-24.

²From the Preamble to the Constitution of the World Health Organization.

2. The health of the individual affects everything he does, and everything he does from birth to death influences his health.
3. The parent has the first responsibility for the health of the child.
4. The school has the responsibility for:
 - a. Supplementing and reinforcing good home teaching.
 - b. Improving inadequate home training and care.
 - c. Helping the parent do the best job possible for the health of the child.
 - d. Preparing pupils for meeting their responsibilities when they become parents.
 - e. Helping pupils assume responsibility for their own health practices in accordance with their stage of development and their home conditions.
5. Health is one of the primary objectives of the education program. The health of the pupil should be one of the first considerations when planning school activities and experiences.

In 1918, in defining the "Cardinal Principles of Secondary Education," health was stated first on the list. Since that time and particularly within the last decade, health has been given a more and more prominent place in the school curriculum. In 1938 the Educational Policies Commission stated three ways in which a person should be health educated:

"The educated person understands the basic facts concerning health and disease."

"The educated person protects his own health and that of his dependents."

"The educated person works to improve the health of the community."³

Concrete evidence that the people of North Carolina consider and expect health to be included as an integral part of the school program is shown by certain statutes concerning health in the schools and by the appropriation of certain funds to help carry on the health education program. (See Appendix.)

In planning activities and experiences for boys and girls, the school must evaluate the effect on their total growth and development. Many times health "teaching" may be ineffective because there is some activity in the school which is in violation

³Purposes of Education in American Democracy, Education Policies Commission, Washington, D. C., 1938.

of good health practices. Certainly, no activity should be included in schools which has been proven detrimental to health, nor should worthwhile activities be conducted in a manner that endangers the health of pupils.

Examples:

A knick-knack food store in the school may prevent the pupil from getting an adequate lunch because he spends his lunch money for candy or soft drinks. These highly refined foods of high sugar content are detrimental to the teeth, unless teeth are brushed immediately after eating and this is not practical at school. (See "Nutrition Education".)

It is recognized that boys and girls should get adequate rest and sleep. However, schools sometimes cause this health principle to be violated by scheduling activities at school during the week which keep the pupils up past their bedtimes.

Another good health practice is to eat meals slowly. Sometimes schedules do not provide adequate time for boys and girls to eat leisurely or to rest after eating.

These are only a few instances where schools must be alert to be sure that all activities and practices in the school program are in accord with good health practices and contribute to the total growth and development of the boys and girls.

Responsibility for the Development and Administration of the School Health Program.

A very important factor in a successful school health program is cooperative leadership by education and health authorities.

While *health instruction* and *school administration* are primary responsibilities of the school administrator and the *control of communicable diseases* is the primary responsibility of the health department, joint planning and working together in these matters usually result in a better school health program.

North Carolina has a Joint School Health Plan (See Appendix). In this plan and in the "Health Services Section" of this publication are suggestions to help the school administrator and the health officer work out joint plans for the health service program for each county or city school unit and for the individual school.

"Public schools cannot surrender the educational program to any other group or organization, nor can health departments or

professional health personnel delegate or transfer their responsibilities for technical health services. When professional health personnel are in a school to render a professional or technical service, they should discharge their responsibilities in line with the administrative policies and organization of the school".⁴

Since health is so interwoven into the total school program, the school administrator has the authority and responsibility for developing and carrying on the health education program within the school. Many resource persons and agencies are available in the community for enriching and broadening the school experiences. School administrators and teachers are under obligation to use these resources whenever they add to the effectiveness of the health education program and as long as they are under the direct supervision of the instructional personnel of the school.

School administrators and teachers should guard against pupils being exploited to satisfy a special interest of some "worthwhile cause".

Democratic Procedures in Program Planning.

The school administrator (superintendent or principal) will find that democratic procedures in planning for the school health program are important for the following reasons:

- To meet problems of county-wide importance and scope.
- To use resources (funds and personnel) to best advantage.
- To interpret needs to more people.
- To get the thinking of a larger group of people.
- To include in the planning all who are to carry out the program. People who help plan take a greater interest in helping carry out the plans.

The State Department of Public Instruction and the State Board of Health have set up a joint division, The School Health Coordinating Service, to work with the school and health departments and to coordinate the efforts of both agencies to provide the best health program for the schools. County and city units will find joint cooperation and coordination helpful in extending their health services.

1. County-wide and City-wide Planning.

County-wide and city-wide planning may be done in various ways:

⁴Improving the School Health Program in the Southern Region: Southern States Work Conference on Educational Problems. Tallahassee: State Department of Education, 1949, p. 14.

- a. The superintendent and health officer may have joint administrative planning sessions.
- b. County and city-wide planning can be carried on in called planning sessions.
- c. The administrator may invite or cause to be organized an advisory council or committee to assist him in planning the health program. This council or committee should meet periodically to assist the administrators in planning and conducting the school health program. The council or committee may be developed in any one of a number of ways and may have a variety of plans for membership.
 - (1) Many school administrative units find it best to have a small number of representatives on the council. Whenever a special interest or a special project is to be considered, other people, who are especially interested or who have definite contributions to make, are invited to the council meeting.
 - (2) Some systems carry on health council work in an education planning council.
 - (3) Sometimes the school has one or more representatives on the community health council.
 - (4) Some school systems make use of their curriculum committees to do the work usually carried on by the health council.

Much of the work is done through committees



- (5) Some councils have wide representation. In these large councils much of the work is done through committees and sub-committees. A large council would probably have most of these listed below represented on the councils:

The school administrator, supervisor, health educator, and supervisors of health and physical education, visiting teacher, lunchroom supervisor.

The health officer, nurse, health educator, sanitarian, etc.

Representative of the department of welfare.

Representative of the medical society.

Representative of the dental society.

Representative teachers—primary, upper elementary, high school, health, science, principal, etc. (One from each school in the unit.)

Student representatives.

Parent representatives.

Community agency representatives.

2. School-wide Planning.

The principal should accept his responsibility to provide opportunities and give leadership for cooperative planning for the health education program in the individual school, as in the county-wide planning, through an organized council or committee. A school council or committee may be of various sizes and may serve in a number of ways to assist the principal.

Large schools may have a health council or committee with membership including some or all of the following: principal, one or more elementary teachers, one or more high school teachers, public health nurse, case worker serving that community, custodian, lunchroom supervisor, student representatives, parent representatives, and representatives from community organizations.

3. Priorities in Planning.

The health program should be planned to meet the greatest needs first. The most up-to-date scientific information and guidance should be accepted. The program will have to be planned within the framework of available funds and resources. For example:

- a. See the "Health Services" section for priorities in examination.
- b. See "Teacher Screening and Observation Manual" in the Appendix for teacher's part in the screening program.

c. Consult—

- The local health department for help in determining the greatest health problems in the community.
- The 1948 edition of *Health Education*⁵ for a list of a "Dozen Big Health Problems."
- The personnel of the School Health Coordinating Service for help in program planning to meet the needs of boys and girls.
- The section on "Planning the Year's Work" for suggestions regarding teacher-pupil planning.

Evaluating and Purchasing Health Education Materials and Aids.

Scientific, up-to-date, attractive health education materials are valuable aids in the health education program. They should be suited to the needs and developmental age of the pupil and should be readily accessible to teachers and pupils.

Teachers who are to use them should have an opportunity to help evaluate and select them.

Materials should be selected from lists recommended by professional personnel, such as State consultants, the local supervisor, the health educator, the librarian or the library supervisor.

Materials needed most should be bought first. Care should be taken against buying from the first or "most high powered" salesman unless the need for that particular material is recognized.

Priority needs should be planned for by faculty groups.

The school should determine whether it can afford the material in terms of the total amount of money available.

Free materials should be selected and used when they:

- Meet recognized needs of boys and girls.
- Contain information which is scientifically correct (ask a qualified local health resource person).
- Follow good educational principles.
- Are suited to the age and grade of pupils who are to use them.
- Are not designed to sell a particular product.
- Do not advertise products which are not recommended for children or youth.

Evaluating health education materials for the purpose of purchasing can be a very important professional project.

In the section "Planning the Year's Work" in this publication, there is a discussion for the teacher on the importance of, selection, and use of health education materials.

⁵Health Education, American Medical Association and National Education Association. N. E. A., 1201 16th Street, N. W., Washington, D. C.

Visual Aids.

Many counties have purchased films, filmstrips, slides, etc., as a part of their visual aids library. Individual schools have built up a library of filmstrips. Many schools borrow or rent films from other sources. Some of these sources are listed in this publication. (Consult Index.)

Child Growth and Development—Some Implications for Administration and Curriculum Planning.

1. Children learn health habits and attitudes by observing adults and adult practices. Examples set by school staff members serve as one of the major instructional procedures of the school. In the same way, the physical and emotional environment of the school must be considered as a major learning aid for children who spend six or more hours every day in this environment.
2. In the early elementary school the major emphasis of instruction in health should be on habits and attitudes related to everyday experiences within the immediate life of the child. It should be recognized that the home has already developed a set of health habits and attitudes in each child. These habits and attitudes will vary greatly from child to child. In some instances they will vary greatly from those which the school believes to be desirable. Some caution should be exercised to avoid upsetting children concerning their homes when it appears that existing habits and attitudes are not healthful.
3. From about the last two years of elementary school through the high school years appears to be the most effective time to emphasize:

Problems of group and community health.

Detailed consideration of reasons underlying personal and community health practices.

A direct approach to instruction regarding health attitudes.

The School, the Community and the Health of the Pupil.

"Only through mutual understanding and planned cooperation among all agencies which serve the child can duplication or complete omission of needed services be avoided".⁶ (For a more detailed discussion, see the section on "Community Health").

⁶Health in Schools—Revised Edition. AASA-NEA—1951.

Health of the Staff.

From the standpoint of the school health program the health of the administrator and the teacher is one of the factors that influence child growth and development.

To exert effective leadership the administrator needs to take care of his own health and accept his responsibilities regarding the health of his staff members:

1. To employ healthy, emotionally mature teachers.
2. To see that all staff members have required health examinations and certificates.
3. To organize and administer the school program so that teachers and pupils can live happy and healthy lives by avoiding tensions that may be caused by such factors as:
 - Overloading teachers and pupils.
 - Driving rather than motivating.
 - Uncertainties regarding policies, goals, and expected standards.
4. To develop good relationships between administrators and teachers.
5. To practice and to encourage teachers to practice the habit of seeking medical, dental, and other health services whenever needed.
6. To stay at home when ill and to encourage teachers and pupils to do the same.
7. To encourage all school personnel to get adequate rest and recreation.

SCOPE AND INTERRELATIONSHIPS

Scope.

For purposes of clarity and convenience the school health program, which includes all of the health learning experiences, is considered under their three main phases; namely, health services, healthful school living, and health instruction.

The school health program should also be closely related to community health programs, since the school is a part of the community. (See section on "Community Health", which deals more fully with school health as it relates to the community.)

The school health service program in North Carolina is a joint program of the State Department of Public Instruction and the State Board of Health on the State level. In the counties and cities it is jointly administered by the superintendent of schools

and the local health officer according to policies adopted by the State Board of Health and the State Department of Public Instruction. (These policies are outlined more fully under "Joint School Health Plan" in the Appendix.)

1. **Health Services.** This phase of the school health program includes those services rendered school children to protect and improve their health, including health appraisal procedures by teachers and nurses, health examinations by physicians and dentists, follow-up to get correction of remediable defects, adjustments of the school program to defects that cannot be corrected, procedures for the control of communicable diseases, and the care of emergency illnesses and accidents. (See section on "School Health Services.")
2. **Healthful School Living.** This involves provision for safe and healthful surroundings, including all of the factors related to mental, emotional, and physical environment which may affect favorable learning or health. (See section on "Healthful School Living.")
3. **Health Instruction (Including Safety).** Health instruction is that phase of the total school health education program that is designed to provide pupils with learning experiences for the purpose of influencing knowledge, attitudes and practices relating to individual, community or world health.⁷

Health instruction may be carried on through a variety of ways including:

Teacher example.

The use of "teachable moments"—taking advantage of pertinent opportunities as they happen.

Daily healthful living.

Correlation with other subject areas.

Direct planned teaching centered around particular health problems or subject areas.

Individual guidance.

Health instruction constitutes the school's major effort to prepare children for healthful living while in school and for adult life. A major portion of this publication, therefore, concerns itself with the various phases of health instruction.

⁷Adapted from *Health Education*, Washington: National Education Association, 1948, p. 4.

For more details see "Planning the Year's Work", and the suggested resource units for use by classroom teachers in accordance with the needs and interest of the children.

Time required and recommended.

In the elementary school health program, it is required that 30 minutes per day (or the equivalent in time interwoven into the school day) be devoted to health instruction. However, the teacher will emphasize the various areas of health education in relation to the needs of the children. More than 30 minutes may be spent some days when a particular health problem arises and more time is needed.

In the junior high school the requirements are the same for grades 7 and 8 as the requirements for grades 7 and 8 of elementary schools organized on the 1-8 plan.

The requirements are the same for the 9th grade in junior high schools as for the 9th grade in high schools of grades 9, 10, 11 and 12.

In junior high school situations where some departmentalization is practiced, the schedule should be so arranged as to insure that pupils have the amount of health instruction required for that grade.

In the high school one unit of a combination of health education and physical education is required for graduation. The regulation states that health education is required two days each week and physical education three days each week during both semesters of the 9th grade.

In the 3-2 plan for health and physical education, many schools organize boys and girls into separate classes due to the limited gymnasium facilities. Most schools follow the plan of having the boys and girls in separate physical education classes two days each week, and together in co-recreational activities for the 3rd physical education class each week. The other two days each week are devoted to the health education class.

A sample schedule is:

Boys—physical education—Monday and Wednesday
Girls—physical education—Tuesday and Thursday
Boys and girls together—physical education—Friday
Boys—health education—Tuesday and Thursday
Girls—health education—Monday and Wednesday

Some schools follow the plan of alternating health education and physical education, giving an average of $2\frac{1}{2}$ days each week to each subject. This plan has been accepted as meeting the requirements for graduation.

A sample schedule is :

1st week—physical education—Monday, Wednesday, Friday
health education—Tuesday and Thursday

2nd week—physical education—Tuesday and Thursday
health education—Monday, Wednesday, Friday

It is recommended that an advanced course in health education be offered in the senior high school. This may be a one-semester or a two-semester course, depending upon the local school situation. It should be designed to help senior boys and girls get information in preparation for adult living, preparation for marriage, etc. Some of the titles now being used for such a course are: Preparation for marriage, social living, senior problems in health, preparation for family living, education for responsible parenthood, and social development.

In other high school courses it is expected that health education will be given its rightful place as a part of other school subjects, including biology, home economics, physical education, sociology, agriculture, civics and economics. High school teachers should make use of the opportunities for individual guidance with pupils concerning their health problems.

Interrelationships of Phases of the School Health Program.

While the three phases of the school health program—health services, healthful school living and health instruction—are logically separated for presentation in this publication, they are so interrelated that each is dependent upon the other for full realization of maximum educational outcomes. For example, the health examination may be a procedure handled in routine fashion by the physician, or it may be made an educational experience by the physician and teacher who together develop a real appreciation on the part of the student of the importance of periodic health examinations. Health facilities may be just so many fixtures to be used by students or they may be used as instruments of instruction.

Policies and practices which best point up the relationship between the three aspects of the school health program should be developed.

PHYSICAL EDUCATION AND THE SCHOOL HEALTH PROGRAM

Physical education is that phase of education which, through the medium of physical activities, guides the individual in the successful solution of persistent life problems.

Contributions to Education.

Modern physical education should make definite contributions to the major objectives of education or else it has no place in the school program. The Educational Policies Commission of the National Education Association has re-defined the purposes of education in terms of the following objectives:

- “Objectives of Self Realization;
- Objectives of Human Relationship;
- Objectives of Economic Efficiency;
- Objectives of Economic Responsibility.”¹

In order to formulate sound objectives of physical education, it is suggested that every teacher be familiar with the detailed analysis of these objectives of general education.

Objectives of Physical Education.

The objectives of a well planned physical education program in a modern American school are these:

- “To promote physical and mental health;
- To utilize physical activities for social education;
- To provide opportunities for the development of recreational interests and skills;
- To contribute to healthful school living.”²

Modern Physical Education.

Modern physical education is quite different from the antiquated programs that were called physical culture or physical training. It not only develops athletic skills, strength, grace and endurance, but it also goes beyond these. It is a means of shaping minds, emotions and behavior of children, youth and adults. It provides leisure time activities and helps boys and girls to live and work together in a democratic society.

¹Educational Policies Commission, “The Purpose of Education in American Democracy,” Washington, D. C. National Education Association, 1938.

²Health Education, A Guide for Teachers and a Text for Teacher Education, National Education Association, Washington 6, D. C., 1948.

Related But Not Identical.

Physical education, just as many other subject areas in the school program, provides experiences for boys and girls which may favorably affect their health. Physical education activities when properly organized and conducted and when based on the needs of the individuals participating result in better physical and mental health. However, physical education and health education are not synonymous as so many people seem to think.

Health Education is the sum of all experiences which favorably influence habits, attitudes, and knowledge relating to individual and community health.

Physical Education is that part of the school program which concerns itself largely with the growth and development of boys and girls through the medium of big-muscles activities.

Physical education and health education are closely related, since both are concerned with developing good health habits and attitudes with regard to cleanliness, regular exercise, recreation, nutrition, sleep and rest, mental hygiene and social relationships, medical examinations and medical care.

State Requirements in Physical Education.

The minimum requirements for physical education in the elementary grades (1-8) is 30 minutes per day exclusive of recess time and relief periods.

Physical education is required of all ninth grade students—a minimum of three days per week (45-60 minutes per period.)

The State Department of Public Instruction recognizes that physical education activity is needed by all boys and girls in secondary schools and recommends that local schools require physical education at least in grades nine and ten and offer it as an elective in grades eleven and twelve.

Publication No. 279, *Physical Education in the Elementary and Secondary Schools*, North Carolina, State Department of Public Instruction, 1952, contains details regarding the organization, administration and conduct of the recommended State program of physical education in grades one through twelve.

RECREATION AND THE SCHOOL HEALTH PROGRAM

Recreation, like physical education, has a definite contribution to make to the health of boys and girls. Many activities that are classified as recreational when carried on by local recreation

departments are classified by another name when carried on by schools; for example, physical education, intra-mural sports and athletics, art and music. Many of these activities offer possibilities for health outcomes as described in the statement on physical education.

Wholesome recreational activities, whether active or quiet, contribute to personality integration and satisfactory living. Enjoyable recreational activities contribute to good mental hygiene by relieving tensions and by providing an outlet for pent up emotions and excess energy. They also provide an opportunity for students to become accepted members of the peer group.

The school is one of many agencies concerned with training and guiding children, youth and adults. The school does not assume complete responsibility for recreation, but should exert leadership in the development of a cooperative program with other agencies and organizations. The school has the specific responsibility for teaching the skills for a number of leisure time activities and for providing opportunities for boys and girls to participate in many recreational activities.

Recreational leaders, whether teachers or personnel employed by other agencies, should have an awareness of the health problems associated with recreational programs. Excessive participation of some students in school and out-of-school recreation can be detrimental to health. Inadequate sleep, irregular meals, eye strain, and too many physical activities may easily result in chronic fatigue, tension, and lack of resistance to disease. Recreation programs of schools and other agencies should be evaluated on the basis of the positive contributions to physical and mental health of participants rather than on the basis of spectator appeal or commercial value.

For more details concerning recreational activities see *Physical Education in Elementary and Secondary Schools*, N. C. State Department of Public Instruction, 1952.

FINANCING THE SCHOOL HEALTH PROGRAM

Funds for financing the school health program, for the most part, are provided by State and local appropriating authorities. State funds are channeled through the State Board of Education to local school administrative units and through the State Board of Health to local public health departments. Local taxing

authorities provide funds for schools and health departments for certain phases of the school health program.

Funds for Adequate, Safe and Sanitary School Plants.

It is the responsibility of the local county or city to provide funds for adequate sanitary and other health facilities in the public schools. Minimum sanitary and other health requirements for accreditation may be found on pages 63-91 of the *1953 Handbook for Elementary and Secondary Schools*.

Primary responsibility for school construction and maintenance rests with local counties and cities. However, the 1949 and 1953 General Assemblies made provision for a vote of the people on bond issues to aid the counties and cities in school plant construction.

School health funds that are allocated to school administrative units by the State Board of Education may be used to purchase equipment, such as scales and beds for the health room and other equipment essential to the health or first-aid room. General equipment, even for the health room, such as desks and typewriters, may not be purchased out of these funds.

Funds for Health Instruction.

Teachers of health are paid, as are other teachers in the public schools, primarily out of State funds. Some cities and a few counties have voted supplements to employ additional teachers, some of whom are teachers of health. Teachers are allotted on the basis of average daily attendance, but the decision as to the number of teachers employed for each of the several subjects in the high schools is left to the judgment of the local school administrator. It is, however, the responsibility of the local school administrator to employ teachers who meet State certification requirements to teach those subjects required for graduation and for those offered above the State requirements.

Health supervisors, upon approval of the State Department of Public Instruction, may be paid from State funds for general supervision; or they may be paid from school health funds allocated to the local school administrative unit.

Basal health textbooks are furnished free by the State to children in grades 4-8. In addition, the State provides a small sum for the purchase of library books. Also, the State provides funds for the purchase of instructional materials. Local funds are used

for the purchase or rental of supplementary health texts in grades 1-12.

Funds for Health Services.

1. Funds from the State Board of Education.

From 1949 to 1953 the State Board of Education allocated annually to city and county administrative units \$550,000 for school health. These funds were allocated on the basis of 50¢ per pupil in average daily membership and \$1,000 per county, regardless of size. (For details regarding the "Joint School Health Plan" of the State Department of Public Instruction and the State Board of Health see Appendix.)

Most of the counties and cities spend a major part of the school health funds for medical examinations and for the correction of chronic remediable defects for children of parents who cannot afford to pay for medical services.

The Vocational Rehabilitation Service of the State Department of Public Instruction renders such services as may be necessary to make it possible for disabled citizens to earn a living. This service is financed by appropriations of the State and Federal governments. School age children sixteen years of age and over may get financial assistance from this source for corrective surgery and for other services to remove a disabling condition. The deaf, crippled, emotionally ill, and those disabled by other conditions can get medical care and other services free if they cannot pay for them.

2. Funds from State and Local Public Health Departments.

The State Board of Health annually budgets for school health to local health departments money for school health based on the number of pupils in average daily membership. These funds are appropriated by the General Assembly. Local health departments are financed in part out of local funds, the amount varying from county to county, the average for the State being between 65 and 70 per cent. (For more details see "Joint School Health Plan" in Appendix.)

In most areas of the State there are also Crippled Childrens' Clinics sponsored and financed by the State Board of Health.

3. *Funds from Local Welfare Departments.*

A variety of services to children of school age is provided through county departments of public welfare which are financed from local, State and National funds.

Financial assistance to meet the needs of children, including hospitalization, correction of defects, etc., is provided by county departments of public welfare when other funds are not available for this purpose. This includes aid to dependent children, general assistance, hospitalization, etc. (For more details, see section on "Community Health.")

4. *Funds from the State Commission for the Blind.*

The North Carolina State Commission for the Blind, which is financed primarily by the State with the financial assistance of Lion's clubs and the North Carolina State Association for the Blind, provides funds for eye examinations, surgery, treatment, and for glasses for all ages including school children.

IMPLEMENTING THE PROGRAM

Through An Advisory School Health Council.

An advisory school health council serves to facilitate the planning and to assist the administrators in carrying out the school health program in the following ways: (See pp. 16.)

- Develop workable policies.

- Determine health needs.

- Set up goals for action.

- Locate available personnel, facilities, materials and other resources in the community and recommend ways they can best be used.

- Suggest ways of coordinating the health activities of the school.

- Maintain liaison relationships between the schools and other community organizations.

- Continuously evaluate the program.

Through Professional Improvement (In-Service Education).

School administrators and other staff members should assume responsibility for individual and mutual efforts toward professional improvement.

Individuals may consider the resources available in such activities as:



Administrators plan with staff members

Extension classes offered by the various colleges.

Summer classes at the colleges.

Professional reading—libraries for this purpose should exist in each school system.

Membership and participation in such professional organizations as:

North Carolina Association for Health, Physical Education and Recreation (Department of the NCEA), Education Building, Raleigh.

Two program meetings per year; periodical *Newsletter*.

American Association for Health, Physical Education and Recreation (Department of the NEA), 1201 Sixteenth Street, Northwest, Washington 6, D. C.

Monthly journal and *Quarterly Research Bulletin*; consultant service, Loan kits, etc.

American School Health Association, 3335 Main Street, Buffalo 14, New York.

Monthly journal.

Administrators should assume leadership and plan with staff members for such activities as:

Workshops, conferences, institutes, and other professional meetings.

Study groups.

Committees on special or continuing problems.

Inter-school visitation.

In planning for in-service education, administrators should take into consideration the need of their personnel for special training in certain areas of health education such as mental hygiene, family life education and alcohol education.

Through Supervisory Services—County and City Supervisors.

Supervisors who work county-wide or city-wide have a responsibility for improving instruction and anything that affects instruction. The general education supervisors have this responsibility for all areas of learning *including health education*. Health educators, health and physical education supervisors, and others working more directly in the field of health education are concerned with improving the total health education program. These special supervisors work closely with the general education supervisors to keep the health education program in balance and coordinated with the total education program. The health supervisor may assist the superintendent in coordinating all of the health activities in the county.

These persons are able to help teachers in all phases of the health education program (see section on "Planning the Year's Work"). They, working county-wide, have an opportunity to share the good things done in one school with the teachers of another school. The supervisor is a key person in assisting with the in-service education activities.

Through State-wide Consultants, Advisers and Supervisors.

State personnel who work in health education, physical education or related areas are available to all sections of the State in so far as time and travel allowance permit. They serve local city and county administrative units, local schools and individuals, usually upon request of the superintendent, supervisor or health officer.

Through Cooperation with Community Agencies.

It is the responsibility of the schools to cooperate with community agencies in programs designed to improve the living

of the people in that community. This may be interpreted to mean:

1. That schools compile a list of agencies and the services available from each agency. (See "Community Health".)
2. That schools make these services known to the students and parents.
3. That school personnel assume their responsibility for the wise use of the services of these agencies in the schools. The schools should not be exploited for money-raising purposes or for circulating advertising materials.
4. The school health council could ably assist in the setting of policies and locating resource services of the community agencies.

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3. *Administration of the Health, Physical Education and Recreation Program in Secondary Schools*, The National Association of Secondary School Principals. 1201 Sixteenth Street, Northwest, Washington 6, D. C. 1953.
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1. *Improving Education In The Southern States*. Southern States Work Conference on Educational Problems. Orville Calhoun, State Department of Education, Tallahassee, Florida. 1949.
2. *Suggested School Health Policies*. A Charter for School Health. Health Education Council, 10 Downing St., New York 14, New York. 1946.

3. *Better Health for School Age Children*. Federal Security Agency, Washington 25, D. C. December 1952.
4. *Desirable Athletic Competition for Children*. American Association for Health, Physical Education and Recreation. 1201 Sixteenth Street, Northwest, Washington 6, D. C. 1952.
5. See references at end of each section and general "References" on pp. 359-364.

SCHOOL HEALTH SERVICES

The school health service program includes those services administered to school children to protect, maintain, and improve their health.

In planning and conducting the school health service program it is also important to consider health services as an integral and inseparable part of the other phases of the school health program; namely, healthful school living and health instruction. In the health instruction discussions included in this publication, suggestions are made for using the health services experiences in the instructional program.

School health services have the following major purposes:

1. Protection of the child against health hazards at school.
2. Health appraisal of all pupils, including teacher observation and screening, nurse inspection, and health examinations by physicians and dentists.
3. Correction of remediable defects through the family and family physician and help in living effectively with non-corrective defects.
4. Prompt and proper care of emergency illnesses and accidents.
5. Adjustment of the school program to meet the needs of children with defects that cannot be corrected.
6. Developing desirable habits and attitudes in pupils regarding health services.
7. Assisting in determining the content of health instruction as it relates to a particular group of children.
8. Providing information for individual health guidance.
9. Education of pupils and parents regarding available health resources and their use.

PLANNING SCHOOL HEALTH SERVICES

Just as the school must function as a part of the total community, so also must the school health program be a part of the overall community health program. In order to insure maximum benefits to the community, the school health program plans and policies should be worked out in every local situation with regard to:

General Policies.

These should be agreed upon by the superintendent and the health officer in consultation with the medical and dental professions and others concerned. Policies should include specifically:

1. Methods for informing parents of defects suspected and recommended procedures to obtain correction.
2. Procedures to determine that parents have followed them and that children having defects are under medical or dental supervision.
3. Use of public funds for correction of defects among children whose families are unable to finance the necessary care.

Who will be eligible.

Methods for determining and certifying eligibility. This should be planned cooperatively with the welfare department.

Agreement on fee schedules—agreement with medical and dental societies.

Specific Procedures.

These should be planned jointly by school and health department personnel in consultation with medical and dental associations. These should include such things as time to finish first screening, types of records and by whom kept, planning with the public health nurse for her regular visits to individual schools, and manner of referrals. The public health nurse is responsible for all of the public health nursing needs within a particular district of her county or city. She is, therefore, familiar with the health problems of many of the families in her district and can be most helpful in interpreting these problems to the teacher for her guidance in dealing with the child.

Planning for the handling of sudden illness or accident at school should include specifically:

1. Accident prevention procedures.
2. First aid training of staff.
3. Provision for isolation of a child suspected of having a communicable disease.
4. Provisions for transportation home of sick or injured children.
5. Provision for notification of parent of child's illness or injury.
6. Conditions under which the school shall call a physician.
7. What physician or physicians to call.
8. Who shall call the parent or physician.



In some local areas medical examinations and booster immunizations are given as a part of the pre-school clinic

Pre-school Clinics or Conferences.

What happens during the first six years of the child's life has a great bearing on what he is and does during his school life. For this reason it is essential to a good school health program to have good maternal, infant, and pre-school health protection and care provided in the community.

The parents of each child who will enter school in the fall are invited to bring the child to a pre-school conference, sometimes called "Beginners' Day Program".

The purpose of the pre-school conference or clinic is to orient the child to school. In some local areas medical examinations and booster immunizations are given by the family physician in his office. In other areas these are given on another day at school, or at the health department where special time may be set aside for this purpose.

Whenever examinations and immunizations are given at the school, it is necessary to plan carefully the advance preparation, the actual conduct of the conferences and the follow-up. Every at-

tempt should be made to make the conference a pleasant period for the child and an enjoyable educational experience for the parent. Since the conference is designed as much to influence the attitude of parents as it is to provide services for the child, maximum success depends on one or both parents being present.

When examinations are given or when the findings of an examination are available, the needs of the child should be explained to the parents. Emphasis should be placed on the importance of getting any defect under treatment when the need is indicated. At this time parents should become acquainted with resources and services available for the necessary corrections and care that are recommended by the examining physician and/or family physician and dentist. (See Handbook for Suggestions for Conducting Pre-School Clinics or Conferences.)¹

Health Appraisal by Teachers.

Health appraisal, including screening by teachers, is an accepted function of the teacher in accordance with policies agreed

¹Handbook for Elementary and Secondary Schools. N. C. Department of Public Instruction. 1953.

The health conscious teacher will be alert at all times to detect any signs of deviation from normal as children go about their work and play



upon by the State Department of Public Instruction and the State Board of Health. It is also a legal function of the teacher according to Section 115-316 of the Public School Laws of North Carolina. However, teachers in North Carolina appraise the health of the children not only because of State policies or laws, but because most of them recognize the importance of such procedures both from the health and education points of view. (See "Teacher Screening and Observation Manual" in the Appendix.)

Daily Observation.

Since the teacher is the only person outside of the home who sees the child daily, he is in a strategic position to detect early signs indicating that something is wrong with a child's health. The teacher's function in health appraisal is not difficult; it never involves diagnosis but merely *looking for* and *seeing* and *pointing out* to the parent, nurse, or physician that the child appears or acts as though he is not well. Alert daily observation by the teacher furnishes the physician with many important clues which may be useful in pointing medical examinations towards possible health problems.

The health conscious teacher will be alert at all times to detect any signs of deviation from normal as the children go about their work and play. The teacher should, however, give special attention to how the boys and girls look and act the first thing in the morning and at such times as deviations from normal may be especially apparent; for example, during lunch and during and after the physical education period.

Teacher Screening.

Teachers sometimes magnify the difficulty of screening, yet it requires relatively simple but specific procedures in addition to teacher observation. Screening devices, such as weighing and measuring and testing vision with the Snellen "E" Chart, are measures used by teachers to discover those children who may need further attention from medical or dental personnel. Screening by the teacher is important from a teaching point of view. It is one method of determining the needs of children as a basis for individual guidance as well as group health instruction.

Since certain phases of a child's health may change rapidly and may interfere with school progress, screening tests by the teacher are essential supplements to less frequent medical examinations.

In order to attend to pupil needs early in the school year, the first screening tests should be done as soon as possible, preferably no later than the end of the first or second month.

The Snellen "E" Chart is recommended for use in vision testing by teachers. Several studies that have been made and others now under way seem to indicate that the best results for the amount of time and personnel used in vision testing is by a combination of keen observation by the teacher and testing with the Snellen "E" Chart. It is generally believed that the best results in preliminary eye screening can be achieved by the classroom teacher who sees the child daily. Therefore, the use of an eye specialist to do the preliminary eye testing is not recommended.

Audiometer testing for hearing defects is a technical part of screening that is handled separately, usually by the nurse, a special teacher or a person employed for the purpose. See the publication "School Hearing Conservation Manual", State Department of Public Instruction and State Board of Health.) If audiometer testing and other specialized procedures, such as tuberculin testing, urinalysis, blood testing, and examination of feces for hookworm, are to be conducted, they should be planned

Audiometer testing



jointly by school and health department personnel well in advance of the beginning of such procedures.

(Detailed suggestions for screening and observation are contained in the "Teacher Screening and Observation Manual" in the Appendix. Suggestions about the use of screening and observation as teaching techniques are also contained in the "Planning the Year's Work" section.

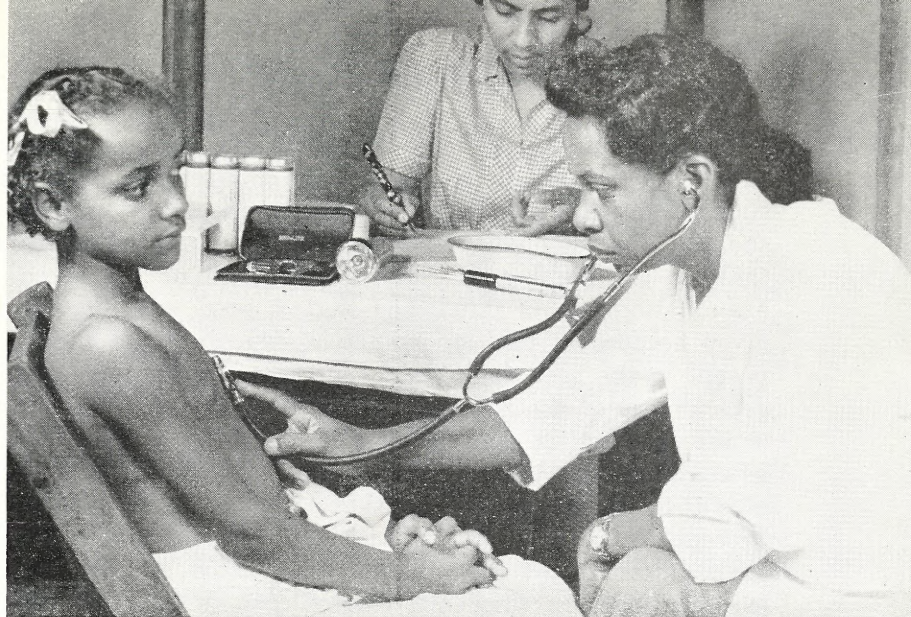
The Nurse's Role in Health Appraisal.

1. The nurse participates with the principal and teachers in planning the details of the health appraisal procedure in accordance with the policies adopted by the entire school or entire county or city administrative unit.

Upon request of the principal, whose responsibility it is to plan group meetings of teachers, the nurse may meet with all of the teachers in a school to plan the specific responsibilities of the teacher and the nurse. Sometimes the planning is done with individual teachers in accordance with the needs of the teacher for assistance and in consideration of the time the nurse can work in the school.

2. The nurse helps the teacher to become skilled in observation and simple screening procedures.
3. After the teacher has completed the first screening of her group, the nurse and teacher should go over the findings together and review the records. The teacher may want the nurse to recheck certain children before referral for examination by the physician.
4. The nurse often helps the physician with certain phases of the examination.
5. The nurse assists in interpreting medical findings to parents, school personnel and pupils who are old enough to understand. Interpretation to the pupil is especially important when the parent is not present at the examination.
6. The nurse performs the follow-up of health problems by having conferences with teachers, parents, pupils, and by home visitation.

According to a study made in 1951, "Responsibilities of State Health and Education Departments for School Health Services", which was sponsored jointly by the National Council of Chief State School Officers and the Association of



Examination of children referred by teacher or nurse

State and Territorial Health Officers: "It is now generally accepted that follow-up of health problems through conferences with teachers and pupils and home visitation is a better use of the nurse's time than having her take full responsibility for conducting screening tests."¹

Health Examinations.

Recommendations for Medical and Dental Examinations:

1. Teachers and nurses should encourage parents to get periodic medical and dental examinations for their children from their family physicians and dentists. High school students should be encouraged to assume some responsibility in this regard.
2. After the teacher screening and the nurse-teacher conference, special efforts should be made to get children who are suspected of needing medical and dental care to go to their family physician or dentist or medical personnel supplied by the health department.
3. Examination by health officers and by medical personnel supplied by the health department should be held at a place agreed upon by the health officer and school superintendent for those children referred by teacher and nurse who do not go to their family physician.

¹School Health Services, The National Council of Chief State School Officers and the Association of State and Territorial Health Officers.

4. Periodic examinations should be provided by medical personnel supplied by the health department for children who fail to get such examinations from their family physician. Emphasis should be on the quality and scope of the examination rather than on the number of children examined or the speed of examination. It is important that a good examination be given because of the importance of educating the child and parent to the need for periodic medical examinations and to detect most of the physical and mental defects. The extent of the examination must be worked out with the health officer or examining physician. It may be desirable to include urinalysis, hemoglobin determination, or such other laboratory procedures as may be indicated. A representative health examination might include the items listed on the medical examination card furnished free of cost by the State Board of Health.

At the present time the general recommendation is that the periodic examination be carried out once every three years or about four times during the twelve year school period. In some areas with rather limited facilities available, the periodic examination might have to be scheduled less frequently.

In planning the examination program the need for examinations of those referred by the teacher and nurse should in no case be overlooked. *Preference should be given to this group over any others except the pre-school group.*

It is recommended that the medical examination be scheduled in the following order of priorities:

- Pre-school (or 1st grade when missed in the pre-school examinations)
- Pre-school and referrals
- Pre-school, referrals and 9th grade
- Pre-school, referrals, 4th and 9th grades
- Pre-school, referrals, 3rd, 6th and 9th grades
- Pre-school, referrals, 3rd, 6th and 9th and 12th grades

There may be a few local situations in which the above recommendations may not be best. For example, where the majority of the children do not continue to high school, it may be better to have the second periodic examination in a grade below the 9th grade.

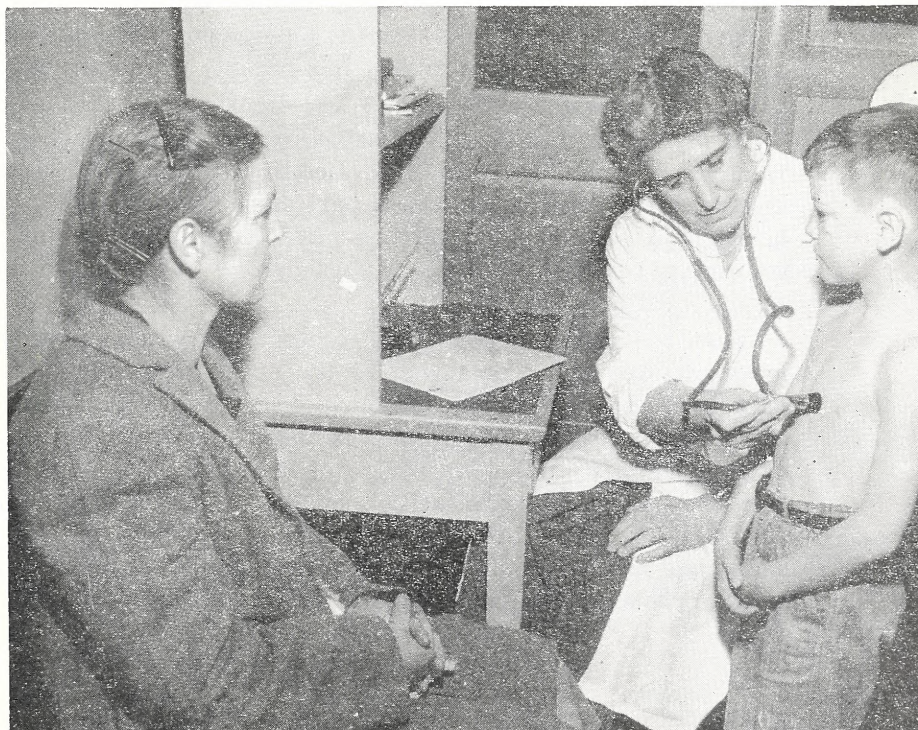
All participants in athletics should be examined before each season of participation. An examination should be given athletes following illness or injury before they return to competition.

State health and education administrators agree with the conclusions reached by the First National Conference on Physicians and Schools, October 1947; namely, "that there is no reason to permit special examinations of athletes to interfere with general examinations of all pupils."¹ The athlete should be encouraged to take the responsibility to secure the examination from his family physician. However, the school should arrange to have all athletes examined who are not able to secure such examinations from the family physician.

5. Enough time should be provided for the physician to make a reasonably thorough health appraisal. Parents of elementary age children should be present. The physician should also have an opportunity to talk with pupils and/or parents about the needs for any medical or dental care indicated, and to give other appropriate advice about health problems.
6. Preparation for the health examination should include a careful explanation of the purposes and scope of the health examination to pupils in terms understandable by the group to

¹Report of Conference on Cooperation of the Physician in the School Health and Physical Education Program, October, 1947. American Medical Association, Chicago, Illinois.

Parents of elementary age children should be present



be examined. This is generally the responsibility of the teacher who may need some assistance from the health educator, nurse or physician.

Parents, especially of young children, need to be informed about the purposes and nature of the examination before the examination. This is done by letters, preferably sent jointly by the school and the health department, in group meetings of parents and/or by visitation by teacher and/or nurse.

7. Health records, in the schools and in health departments, of pupils to be examined should be made available to the examining physician at the time of the examination.

Follow-up Procedures.

Children with confirmed defects and health needs should be followed-up to see that the remediable defects are corrected, or placed under medical care, and their programs of living should be adjusted to suit their particular needs. Follow-up procedures should be developed cooperatively between health and education departments with the assistance of representatives of parents, the medical and dental profession and voluntary health organizations.

Effective follow-up requires procedures that convince parents of the need for prompt medical or dental treatment for their children. Both school and health department personnel have responsibilities for encouraging the parents to obtain needed care.

Much time and effort will be saved on the follow-up when the family physician performs the health examination, because any needed care may begin as a part of the examination. Both health and education authorities have responsibilities for encouraging parents to select a physician of their choice as a family health adviser.

When the parent has not been present at the examination, a letter of information or a visit by the nurse or teacher or both may be necessary to interpret the child's needs and to encourage the parents to seek such services as may be needed. In the case of older children follow-up begins at the time of the examination, even though parents are not usually present. The physician should advise the youth about his health problems and should encourage him to assume personal responsibility for individual health problems within his control.

School and health authorities should cooperatively work out arrangements for assistance from public and private sources to correct defects of children from homes of low economic status. The section on "Financing the School Health Program" indicates some of the State-wide resources. School personnel should know facilities available for such referrals and how they may be used to the best advantage. Health authorities have the primary responsibility for arranging channels for referral and to make these known to the school.

Schools should modify the program of activities of children with irremediable defects and those under treatment or convalescing in accordance with the individual needs. Adjustments may be needed to provide rest periods, modified or limited physical activity, released time for medical or dental care or defects, modification of class work, proper seating to compensate for eye or ear defects, modification in programs of study, teaching at home or special classes. The best possible adjustment to meet individual needs can be achieved only through close cooperation among parents, physicians, dentists, nurses, teachers, administrators, and guidance personnel and the individual concerned.

Health Records.

An essential part of the follow-up and guidance program is an accessible, accurate and up-to-date cumulative health record. Findings of the teacher's observation and screening, the medical and dental examination, and recommended medical and dental procedures, adjustments or treatments should be a part of the cumulative records.

The development or the adoption of available health records is the responsibility of the health and education authorities. They should seek the technical assistance and cooperation of groups skilled in various phases of the program, such as health, education, guidance, medical, and dental groups.

Record forms provided by the State Board of Health and the State Department of Public Instruction may be adopted for use by the local counties and cities, but this is not required. It is important, however, that *uniform* records be kept in a particular school and there is much advantage in having a uniform record for the entire school system.

Most schools use the following health records:

1. The "Teacher Screening and Observation Record" which is the teacher's work card for each individual pupil. It is used to help find the health problems of pupils, determine their growth progress, and to keep a simple record of what happens each year. (See "Teacher Screening and Observation Manual" in Appendix for more details.)
2. The "School Physical Examination" section on the North Carolina Cumulative Record folder is used by most schools to record the findings of the examination conducted by the physician. Many schools make this folder available to the physician at the school clinic, in which case the findings are recorded on this record at the time the examination is made. The public health nurse usually makes, or gets someone to make for her use, a copy of the record of any child who needs a correction or some other follow-up work.

(Copies of these and other record forms and a copy of the "Teacher Screening and Observation Manual" are in the Appendix.)

The principal of each school should:

1. Plan with his teachers the procedures for transferring the health records, including pre-school conference or clinic records, from grade to grade as the child progresses through the school. In other words, when the child reaches the twelfth grade his health records should include all the information obtained from grades one through eleven.
2. Make health records easily accessible for use by teachers and health and guidance personnel.
3. Emphasize to teachers the importance of keeping the information contained on these records strictly confidential. Such information should not be shown to or discussed with anyone except in a professional manner and with those who need the information.
4. Plan with teachers and nurses, within the scope of the county or city policies, the content of the records, who is to do the recording, and use of the records by the teachers, guidance personnel and health department personnel.
5. Encourage teachers and others involved to keep records accurate and up-to-date so they will be usable.
6. Promote, encourage, motivate and assist in using records as a means of improving the health of boys and girls.

7. Plan with teachers, if not planned on a system-wide basis, a summary record of children found to have defects and deviations from normal, the number under medical or dental care and the number needing attention. Each teacher should make such a summary record for use in planning her instructional program.
8. The principal should collect these summary reports from the teachers and summarize them for his information and use. A copy of his summary should be sent to the superintendent of schools.

Care for Emergency Illnesses and Accidents.

Each school should plan medical programs to handle emergency illnesses and accidents. It is advisable to have written policies, especially with regard to calling the physician, health department, notifying parents or taking the child to the family physician or hospital.

First aid supplies should be kept available and accessible. A list of recommended supplies may be found in this publication, or in any Red Cross First Aid Manual. (Consult Index.)

Teachers and other school personnel should render only emergency first aid and should give no other treatment without the direction of a physician. School personnel should be encouraged to qualify themselves to administer first aid in case of accidents and emergency illnesses. As a minimum, one staff member in every school should be well trained in first aid.

Control of Communicable Diseases.

The health department has, by law, the primary responsibility for enforcement of laws regarding control of communicable disease and has authority to make and enforce such rules and regulations as are necessary to protect all the citizens of the community against the spread of such diseases.

The school's chief responsibilities in the control of communicable diseases are:

1. Encouraging parents to make full use of all available preventive measures, such as immunizations during the first year of life and "booster" or strengthening shots at the time of entrance to school and later when indicated. School personnel should cooperate with health department personnel, family physicians and others in educating parents as well as students,

as to the importance of immunizations during the first year of life, the period when children are most in need of protection. The section on "Communicable Diseases and Sanitation" contains many important facts and teaching suggestions regarding this important phase of health education.

2. Enforcing legal requirements. In North Carolina, children are required by law to be immunized against smallpox, diphtheria, and whooping cough before entering school. School principals should be sure that teachers, especially first grade teachers, know about this law and should require them to get immunization certificates from all first grade children. Immunization certificates or other reliable records of immunization should also be required of transfer students, especially those who transfer from out-of-State schools and from private schools.
3. Encouraging parents to keep sick children out of school. Illnesses of children are usually most contagious in the early stages. Furthermore in the early stages, signs and symptoms of both serious and minor illnesses may be very much alike. Therefore, for the protection of others, as well as for the welfare of the child, parents should keep sick children out of school. Schools and parents should work out a cooperative approach to this problem.
4. Making continuous observation of children by teachers to discover signs of communicable diseases.
5. Protecting students from exposure to communicable diseases through isolation of children suspected of having communicable diseases and arrangements to return such children to their homes. Policies and procedures should be worked out in each school and should be clearly understood by all the school personnel. Children suspected of having a communicable disease should be isolated in a health room or at least separated as far as possible from the rest of the children in the classroom while the child waits for transportation home. Some place for isolation, even though such a room is not exclusively reserved for this purpose is essential. (See pp. 51-54 for suggestions about the "Health Room.")
6. Reporting cases of important communicable diseases to the health department.
7. Cooperating with the health department in the enforcement of laws, rules and regulations regarding isolation, or quaran-

tine and exclusion and re-admission of children with communicable diseases. Public health authorities are coming more and more to believe that closing of schools during periods of epidemic illness is rarely warranted.

8. Assisting health department personnel in the education of families in which disease occur on the methods of preventing their spread. (See section on "Communicable Diseases and Sanitation.")
9. Cooperating with public health personnel in the institution of such community preventive or control measures as may be needed.
10. Enforcing the law requiring annual medical examinations, including chest X-ray, of all personnel employed by schools.

Educational Value of the Health Service Program.

The health service program affords many opportunities to enrich the health instruction program of groups of children as well as to furnish guidance to individual children. The teacher should use the information from the screening tests and medical examinations as a basis for individual guidance and for class instruction, especially when a large group of the class is found to have the same defect, such as dental defects, poor nutrition or hookworm infection. Such records should of course be used on a group basis; individual records are strictly confidential.

The child will have an opportunity to learn about his own needs, what services are needed and how such services may be obtained to correct his defect or to maintain and improve his condition and how to secure these services. In many cases where a child has a defect that is not remediable, as in the case of the loss of an eye or limb, he will be interested in learning more about his condition.

From the standpoint of the medical, dental and nursing professions, the examination affords a unique opportunity for acquainting children with private medical care. In addition to learning how to choose medical services for themselves, these experiences during school life should help students to choose wisely for their own families in later life.

This program affords opportunities for pupils to become better acquainted with the work of the various health personnel. Such experiences might stimulate some of the boys and girls to want

to study the opportunities in these professions from a vocational standpoint.

Evaluation.

No one technique for evaluation seems to be sufficient to determine progress made, and needs still unmet. Evaluation should begin with the beginning of the program and should be continuous. Some of the suggested procedures for evaluating the effectiveness of the health services are:

1. A conference of those who participated in planning and carrying out the services.
2. A record of health problems disclosed through health appraisal procedures.
3. A record of those children whose defects have been corrected and of those under medical care.
4. Observable development of good attitudes on the part of students.
5. Development of knowledge and understanding of child health by school personnel.
6. Interest and cooperation by parents.
7. Improved relationships between nurse-teacher, pupil-health personnel, and others taking part in the service program.

Results of the evaluation should be used in planning and carrying on the health service program in the future.

Health Service Facilities.

It is essential to a good health service program that there be provided in each school a place for conferences with the nurse, for the physician to conduct the examination, and for the care of emergency illnesses and accidents:

SCHOOL HEALTH ROOMS

The Need for School Health Rooms.

Every school should have a health room of some kind. The size of the room or rooms, the number of rooms, and the arrangement of the rooms with reference to each other depends upon, among other things:

1. The enrollment of the school.
2. The availability of transportation to take sick or injured pupils home.
3. The probability of parents, as a rule, being available to come to the school for sick or injured children. This in part is governed by:

The distances parents live from the school.

Whether or not parents have telephones at home and/or at their places of work.

Whether or not parents usually have available transportation to come to the school for the child.

4. Health services needed and service personnel to use the room. Space and facilities should be planned to meet needs for adequate services rather than for existing services which may be less than adequate.

Health Rooms in Old Buildings.

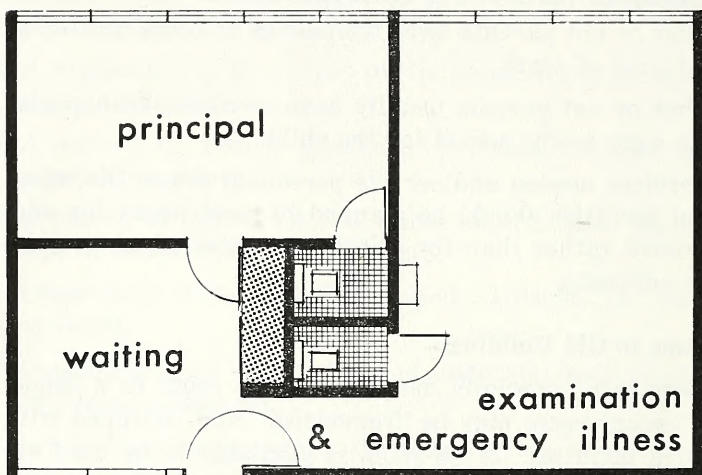
When there is no specially designed health room in a school building, a vacant room may be "remodeled" and equipped with health service facilities. If no room is available to be used exclusively as a health room, a room may be found which can serve multiple purposes. For example, a corner of a book room may be equipped with a cot and other health facilities, or a dressing room off the stage may serve as a health room. The possibility of including a health room in plans for additions to buildings should always be given serious consideration.

Health Rooms in New Buildings.

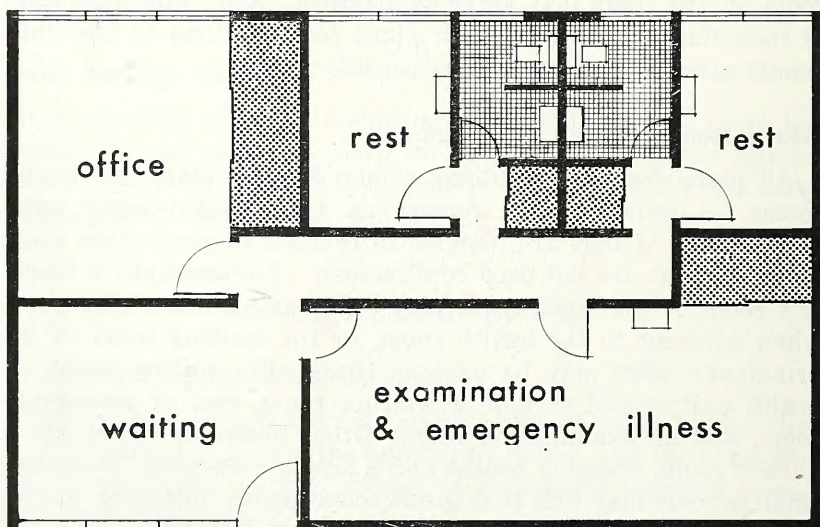
All plans for new buildings should include plans for health rooms. Adequate health rooms can be provided much more economically if they are planned in relation to some other room or rooms that are not used continuously. For example, a teacher's room or guidance room may serve as an examining room when adjacent to the health room, or the waiting room of the principal's office may be used as the health waiting room. A health unit should include a waiting room, rest or emergency room, and an examination room. Other desirable rooms are a nurse's room, dressing booths and a health classroom. However, small schools may find that a one-room health unit with proper toilet and lavatory facilities will serve satisfactorily.

Below are floor plans showing two types of school health units, one for a large school and one for a medium or small school. The plan for the large school is so designed that a section may be omitted, without having to change the plan, and still have a unit containing minimum essentials. For example, the section

A HEALTH UNIT FOR A SMALL SCHOOL



A HEALTH UNIT FOR A LARGE SCHOOL



including the office and the waiting room, or the section including the waiting room and the examination room may be omitted and use the remaining lay-out as it is.

1. The *health unit* (room or rooms) should be located adjacent to the administrative offices rather than to the band room, gymnasium, or noisy shop.
2. The *waiting room* should be bright and cheerful, informally furnished, and may have colorful draperies.
3. The *examining room* should have doors connecting directly with the waiting room and rest room. It should have adequate over-head lighting plus wall sockets. Acoustic ceilings are desirable. It should be at least 22 feet long to provide adequate space for the Snellen eye test. The examining room should have a storage closet and a sink with foot control.
4. The *rest room* (or emergency illness room) should include space for one or more cots and adjoining lavatory and toilet facilities. This room should be equipped with venetian blinds or other controls for natural lighting. Artificial lighting should be subdued preferably below eye level. Lights for reading or studying should not be installed. Separate rest rooms for boys and girls should be considered. Folding screens may be used to improvise private areas to good advantage.

Note: In many schools the same room will serve both as an examining room and the rest room or emergency illness room.

Facilities and Supplies for the Health Room or Rooms.

WAITING ROOM.

1. Cheerful interior, colorful draperies, etc.
2. Comfortable chairs for parents and children.
3. Magazines, books, or toys readily accessible.
4. Bulletin board may be desired.
5. Tables, book cases, magazine racks as desired.

EXAMINING ROOM.

1. Storage or supply closet.
2. Medicine or first aid supply cabinet.
3. File cabinet.
4. Desk and chair for nurse or attendant.

5. Chairs for physician, child being examined and parent. Other chairs as needed.
6. Small table.
7. Platform scales and stadiometer.
8. Snellen E Chart.
9. Full length mirror.
10. Wastebasket.
11. Foot operated sanitary disposal can.
12. Paper cups and dispenser.
13. Paper towels and dispenser.
14. Clinical thermometer.
15. First aid supplies (See section on "First Aid").
16. Hot and cold water.
17. Examining table.

REST ROOM OR EMERGENCY ROOM.

1. One or more cots.
2. Linen supplies, blankets, and pillows for cots.
3. Folding screens.
4. Open shelves for pupil's books.
5. Closet or costumer with hangers.
6. Waste baskets.
7. Bedside table or stand.
8. Mirror.

Selected References.

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HEALTHFUL SCHOOL LIVING

"Healthful School Living is a term that designates the provision of a wholesome environment, the organization of a healthful day, and the establishment of such teacher-pupil relationships that give a safe and sanitary school, favorable to the best development and living of pupils and teachers."¹

HEALTHFUL SCHOOL ENVIRONMENT

Schools should accept the responsibility for providing a healthful school environment for three important reasons.

First, the school is responsible for protecting the health of pupils and other school personnel. Appropriating bodies, and school officials should accept their responsibility for protecting pupils from all hazards while they are at school. In addition to the importance of protective measures, such as immunization, exclusion from school, and early diagnosis, the school plant is of major importance in the prevention of disease. The very fact that children are brought into close proximity to one another makes more important, from the standpoint of the control of communicable diseases, such factors as:

Size of classrooms, corridors, play areas, libraries, toilet rooms, locker and shower rooms, lunchrooms, auditoriums, gymnasiums and all other places where children are together.

Arrangement of furniture.

Proper heating and ventilation.

Cleanliness of floors, walls, fixtures and furniture.

Materials used in construction, especially floors.

Second, the right kind of school environment will serve as an example of a healthful environment which will carry over into the home and community and result in better health facilities in the entire community including the schools. Undoubtedly many homes now have good lights and indoor toilets and other health facilities because pupils have seen and used good health facilities at school.

Third, a healthful environment will provide a medium for teaching health by providing opportunities for pupils to practice good health habits. It is false economy to buy health textbooks and to pay salaries for teachers to teach good health habits,

¹Adapted from the report of the Committee on Terminology of the Health Education Section of the American Physical Education Association.

sanitation, communicable disease control, safety, and other aspects of health while at the same time children are deprived of the use of the best learning situations, that is, the opportunity to use adequate health facilities. John Dewey and other great educators rightly said that the educational process is a process of interaction of the learner with his environment. How true this is in the matter of teaching health.

Legal and Administrative Responsibilities.

Tax-levying authorities and school administrators have certain definite legal responsibilities for providing safe and sanitary school plant facilities. Then, too, there is a moral responsibility which should be more effective than the minimum laws, many of which are completely out of date. There are also many rules and regulations of the State Board of Health and the State Department of Public Instruction designed to protect the health of school personnel. (A summary of the laws is included in the Appendix.)

1. Responsibility of Tax-Levying Authorities.

To provide funds for maintaining standards of sanitation in accordance with, or superior to, standards established by law or by official regulations.

2. Responsibility of County Boards of Education and Trustees of City Administrative Units.

To make policies necessary to guarantee a safe and healthful school environment.

To approve the budgeting of funds sufficient for maintenance and capital outlay.

To approve employment of adequate personnel.

To interpret the needs of the school to tax-levying authorities and to the community.

3. Responsibility of the Superintendent.

To become acquainted with recommended and required sanitation standards and building requirements.

To study and cooperatively plan and work with principals, teachers and citizens on immediate and long range plans for providing healthful school living.

To consult State and local specialists, such as sanitary engineers, lunchroom supervisors, personnel of the Division of School Planning, State Department of Public Instruc-

tion health and physical education personnel, and qualified architects and educational consultants.

To request funds adequate for capital outlay and maintenance of all sanitary facilities, buildings and grounds.

To administer funds for capital outlay, maintenance, and service personnel.

To recommend the employment of adequate and qualified personnel.

To submit plans for renovations and for new construction to:

State Department of Public Instruction, Division of School Planning.
This Division cooperates through an agreement with the Division of Sanitary Engineering of the State Board of Health and with other divisions of the State Department of Public Instruction on the approval of lunchroom and other types of special health facilities.

State Insurance Department.

To assist principals in carrying out their responsibilities.

4. Responsibility of the Principal.

To plan jointly with teachers, custodians and pupils the procedures for the care, use, maintenance and improvement of the environmental health facilities.

To report the needs of the school to the school superintendent and cooperate with him in planning to meet these needs.

To supervise the care and use of the school buildings, grounds and facilities.

To assist in planning and administering the school lunch program.

5. Responsibility of the Health Department.

To inspect periodically the schools, including lunchrooms, and to make recommendations to superintendent and principals regarding sanitary improvements needed.

To approve or disapprove in writing the sanitary conditions of the school.

To provide consultant service to superintendents in planning the sanitary facilities for both old and new constructions.

To stimulate interest on the part of schools and the public in making adequate provisions for a healthful school environment.

6. *Responsibility of the Custodian.*

To keep all of the rooms warm enough but not too hot.

To report to principal faulty conditions or facilities that make it difficult to keep rooms at proper temperature (68-70 degrees F.).

To recognize his responsibility for protecting the children by keeping the school building and grounds clean and safe.

To have a good relationship with pupils so that they will want to cooperate with him in keeping the buildings and grounds clean and safe.

To recognize himself as an important member of the school staff, particularly with regard to the development of health habits and attitudes on the part of students.

To carry out faithfully the detail duties and responsibilities assigned to him by the principal.

To be an example for children in health attitudes and habits.

Standards for Accreditation.

Space in this publication is not adequate to go into all the details in regard to minimum requirements for accreditation. *The Handbook for Elementary and Secondary Schools, 1953*, North Carolina State Department of Public Instruction, contains a section on "The School Plant," pp. 63-79, giving minimum requirements for accreditation, including sanitary requirements. A check list of school plant requirements is on page 85. Also, a copy of the "North Carolina State Board of Health School Sanitation Inspection Form" is included in the Appendix.

Esthetic Influence of a Healthful School Environment.

In addition to the need for providing an environment for pupils that protects them from the spread of diseases and accidents and promotes the development of essential health habits, it is important to give full consideration to the esthetic value of the surroundings. It is not possible to show by mortality and morbidity figures the value of attractive surroundings for work and play, but the value has been demonstrated for many years in industry where production has been increased and absenteeism reduced by improving the esthetic quality of the surroundings. Teachers, administrators and supervisors should see to it that

pupils have opportunities to learn how to make the school a place of beauty, and should give guidance in developing an appreciation for attractive surroundings.

Important Items of Healthful School Living.*

1. Good social and emotional environment.
2. Healthy school teachers, administrators, custodial staff and other school personnel.
3. Approved and adequate water supply.
4. Approved and adequate drinking fountains. (One for each 75 pupils.)
5. Lunchroom that is adequate to meet the needs and is in accordance with or superior to standards of the State Department of Public Instruction and the sanitary requirements of the State Board of Health.
6. Adequate, safe, and sanitary buildings and grounds.
7. Adequate ventilation, heating, lighting.
8. Adjustable seats that are conducive to comfort and good posture.
9. Attractive decorations.
10. Wide halls without dangerous offsets or fixtures.
11. Fireproof stairways.
12. Adequate fire exits and fire extinguishers.
13. Outside doors that open outward on automatic safety latches.
14. Lavatories and handwashing facilities—adequate, accessible, and appropriate size with hot and cold water, soap and towels. (One lavatory for each 50 pupils.)
15. Adequate toilets with required number of urinals and water closets. (Urinals—1 for each 30 boys; water closets for elementary schools, 1 for each 30 girls and 1 for each 60 boys; water closets for high schools, 1 for each 45 girls, and 1 for each 90 boys.)
16. Approved sewage and garbage disposal facilities.
17. Adequate, safe and clean buses with trained and reliable drivers.
18. Adequate janitorial supplies, such as soap, paper towels, toilet paper, brooms, mops, scrub brushes, and window cleaning materials.

*In each case where specific numbers are included they constitute State requirements for new buildings. (See Appendix, pp. , for North Carolina State Board of Health Sanitary Inspection Form.)

19. Custodians' closets on each floor with service sinks with hot water.
20. Maintenance of all facilities, including adequate custodial service.
21. Cooperation of administrators, teachers, and pupils in the proper use and care of all school property, including general cleanliness.
22. Health unit. (See "Health Services.")

ORGANIZING THE SCHOOL PROGRAM

The health facilities and the physical environment are important to the health of students; but equally important are those aspects of school living related to the organization and administration of the total school program, including the daily schedule, length of the school day, balanced activities for the average student, provision for individual differences and capacities, and good pupil-teacher relationships. These factors affect the emotional as well as the physical health of students.

Transportation as it Relates to Healthful School Living.

For those children who are transported by school buses, the responsibility of the school for their health begins when the bus picks them up in the morning. From the standpoint of the health and safety of children the following items are important:

1. The time for picking up the children in the morning should not be too early and the time for returning them in the afternoon should not be too late as to prevent them from having time enough to get adequate recreation, rest, and sleep.
2. The bus should have adequate heating and ventilation.
3. The bus should not be overcrowded.
4. Children who ride in the school bus should be free from communicable diseases including bad colds. This means that parents should be educated to keep children at home when they are apparently sick. Also, it means that children who are found to have signs and symptoms of diseases at school should not be sent home on the bus, if other arrangements can be made.
5. The bus should be clean. Dust flying around in the bus constitutes a possible way of spreading communicable disease germs.

6. The bus driver should be:

Well trained in safety and driver education.

Dependable and of good moral character.

Free from communicable diseases.

Free from physical and mental defects which might impair his skill or judgment, such as visual, hearing, orthopedic and mental defects.

Able to get along well with the other students.

7. At least one person on every bus should be well trained in first aid.

Planning and Organizing the School Day.

In organizing the school day, first consideration should be given to the mental and physical health of pupils and teachers. Undue fatigue, intense nervous stimulation, and anti-social behavior are not only detrimental to the health of teachers and pupils, but they also retard learning. There are so many variable factors in the different schools of the State that it is impossible to suggest a definite pattern. However, teachers and administrators should cooperatively plan the school day with genuine concern for certain main factors.

1. *Capacities of the Individual and Group.*

The type and amount of school activities that can be carried on with profit will vary according to maturity of the group and the physical development of the pupils. Children who have returned to school after an illness may not be able to carry a full load of work for a while. These children should be given less home work until they have completely recovered.

Individuals within a group will vary in capacities to work. Some children may need a modified program or rest periods instead of strenuous play, whereas others may need less reading because of eye strain.

2. *Balanced Activities.*

The total day should provide a variety of activities, alternated so as to avoid long periods of sitting, reading, writing, or even too long recess periods, especially after lunch. Adequate and appropriate time for relaxation, recreation, and eating should be provided. In the elementary grades, the teacher need not follow rigid schedules and thus may change from one type of activity to another when there is an apparent

need. Tensions from long periods of sitting or mental activity may be relieved by two or three periods of one or two minutes each for standing, stretching, walking, or simple exercising. Most primary children cannot concentrate for much more than ten or fifteen minutes at a time.

3. *Overloading Students.*

Procedures should be set up to prevent overloading some students. The number of extra-curricular activities a particular student participates in should, in some cases, be restricted. Limiting extra-curricular activities will result in giving more children opportunities to participate. In deciding the load students should carry, consideration should be given to home assignments, community activities, school club activities, athletic activities, and subject or classroom activities. Individual guidance to students in these matters is needed.

4. *Supervision of Free Periods Including Before and After School.*

Some provision should be made for supervising students who arrive early or leave late on buses. Supervision at these times, as well as during recess periods, needs to involve only enough teachers to guarantee safety and good sportsmanship. Supervisory duties should be rotated among the teachers so as not to be a hardship on a few.

While the physical education period should be directed and *instructional*, the recess or recreational period should be a time for free play in which the students may take part in the games of their choice, provided they are safe and healthful and not too strenuous.

5. *Stresses and Strains Should be Avoided.*

Too much emphasis on marks, credits, tests, and promotion as a constant part of classroom procedures may result in making the school day strenuous and nerve-wracking for both teachers and pupils.

6. *Democratic Procedures.*

The school day will be less strenuous and more educational when teachers and pupils work together to achieve agreed-upon goals. Dictator tactics are hard upon teacher as well as upon pupils. The teacher who can share some of her responsibilities with pupils will be a better, happier, and healthier teacher.

7. *Pupil-Teacher Relaxation.*

The teacher who practices *naturally* democratic procedures in the class room will have less need for "time away from pupils." Also, she will be able to have orderly self-directed activities, thus making it possible to leave the group for a few minutes when necessary.

A special time for teachers to relax or rest is recognized as desirable both from the standpoint of the teacher and the pupils when the organization of the school permits. The mid-morning or mid-afternoon free period for children may provide a rest period for a few teachers, as pointed out above. The physical education period should not be a free period for the teacher. As teachers learn to play with children, this will be recreational.

Many schools schedule a rest or quiet period immediately after lunch. In some of the lower grades of these schools, the children go to sleep. The children of the upper grades rest, or perhaps in some cases go to sleep. In many other schools the period immediately after lunch is devoted to listening to quiet music, recreational reading, or other quiet activities which provide opportunities for relaxation for pupils and teachers.

Many schools schedule a rest or quiet period immediately after lunch



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See also references in sections of this publication:

“Organization and Administration”

“Health Services”

“Communicable Disease Control”

HEALTH INSTRUCTION

INTRODUCTION

The material in the preceding parts of this bulletin is designed to give some help on phases of the school health program with which all school personnel, including the teacher, are concerned. The material in "Planning the Year's Work" and in the resource units following is intended primarily for use by the teacher.

Health Instruction includes that phase of the health education program concerned with planning and organizing learning experiences under the guidance, supervision, or direction of the teacher for the purpose of favorably influencing knowledge, attitudes and practices. The teacher has the greatest responsibility for the health instruction phase of the program.

"Health instruction is effective only when it is concerned with teaching boys and girls the *how* and *why* to live healthfully through meaningful experiences in such a way that desirable attitudes will be developed which will result in healthful living."¹ The health instruction program must be "alive" and interesting to all participating, including the teacher.

The material in each of the various units in this section on "Health Instruction" has been organized somewhat differently. Neither the plan of organization of the units, nor the suggestions included in them, is meant to "pattern" or "stereotype" the health teaching. The teacher, in developing teaching units, should use whatever plan and suggestions are needed to provide opportunities for the group and individuals.

Teachers will find that many of the suggestions included in "Grades 1-3" may be useful in higher grades. Therefore, each teacher should always review the suggestions in all grades below and immediately above the one being taught as part of his preparation and planning.

In other words use the material regardless of where it is placed in the bulletin when it seems to meet a need. It cannot be emphasized too much that in planning any educational program, particularly health education, "start where the children are and then build."

Resource units have been developed in all these many areas to help teachers see the scope of the entire health instruction pro-

¹McNeeley and Schneider. *Teachers Influence Child Health*. Government Printing Office, Washington, D. C.

gram and to provide material for each teacher to have at hand when needed. This is not in any way meant to suggest or imply that every teacher should teach a unit from each of these areas.

Planning together by all teachers in a faculty should help the individual teacher make sure that certain areas are not over-emphasized to the extent that they become uninteresting while certain other areas are left untaught.

PLANNING THE YEAR'S WORK

This section on "Planning the Year's Work" includes guides and suggestions which should be considered in setting challenging, yet attainable, goals in planning a program of activities adapted to the interests and capacities of the pupils.

DISCOVERING NEEDS AND SETTING UP OBJECTIVES

Find Out Early in the School Year.

1. The outstanding health needs of the school and community from the following sources:

The health department.

The principal and other school personnel.

School health records.

Staff members of official and voluntary agencies.

Other citizens and community leaders, including P.T.A.

2. The health resources available in the community.

Personnel—public health, medical, dental, etc.

Funds available.

Materials.

Facilities—clinics, hospitals, etc.

3. Something about the customs and general pattern of living in the community (the cultural patterns).

4. The health needs and interests of the class or group.

Review of the cumulative records.

Screening tests.

Daily observations.

} See the North Carolina
Teacher Screening and
Observation Record.

Results of health examinations.

Sociograms (friendship tests).

Teacher-nurse conferences.

Paper and pencil tests.

Personal interviews.

Parent-teacher conferences.

Home visits.

Conferences with last year's teachers.

Class discussions.
Check lists.
Question box (unsigned questions).
Individual conferences.
Inventories.
Diaries.
Autobiographies.

Growth and Development.

Facts regarding growth and development of children and youth have been taken into consideration in the preparation of all sections of this bulletin. (See "Organization and Administration"). In the "Mental Health" section will be found a chart tracing the social and emotional growth of children.

The following publications contain useful information on Growth and Development:

1. Children's Bureau Publications. Provided free at the local health department by the State Board of Health.
Your Child From One to Six.
Your Child From Six to Twelve.
Guiding the Adolescent.
2. Jenkins, Schacter, and Bauer. *These Are Your Children*. Expanded edition. Scott, Foresman and Company, Atlanta, 1953.

Work-Out Tentative Plans and Discuss:

1. With the principal. Near the beginning of the school year ask for a conference with the principal. Talk over tentative plans (probably at the same time discuss plans for other phases of work), ask for his advice, suggestions and approval.
2. With faculty members, individual or as a group.
3. With the public health nurse serving the school. Suggestions are given in the "Health Services" section and in the "Screening and Observation Manual" in the Appendix to help plan and work with the public health nurse who serves the school.
4. With the school supervisor and/or health educator. The supervisor can help teachers work out plans to meet the health needs of the boys and girls. The health educator, working with the health department and schools, is especially qualified to help locate resources and materials, point up problems, and help the teacher work out and carry on health activities. The teacher should request the services of these workers and not

wait for them to offer help. Ask them to help in finding other resource persons and materials. *There are usually more available resources in the community than most teachers know about.*

PROGRAM DEVELOPMENT

When needs have been determined, interests considered, and tentative plans agreed upon, the information in this publication will be helpful in developing plans.

The Resource Units.

These units contain much information requested and contributed by many teachers in North Carolina. They are for use in planning and developing the health activities for meeting the needs of boys and girls as they progress from grades one through twelve. There will be wide variations in the health needs of groups within a school and of groups in different schools.

1. This material will be useful in developing a program to ensure that:

Every boy and girl has a variety of meaningful experiences. There are no gross omissions in the health education program.

The individual and group needs of the boys and girls are met.

The health instruction program is stimulating and challenging.

The teacher knows where to get additional information.

The teacher can locate people to assist and help enrich the health education program.

2. When developing teaching units the teacher may:

Use material from these resource units to aid in the development of larger units or areas of learning. For example, in social studies or science.

Combine information from two or more of these resource units under a different title.

Use these resource units with the same title, same knowledge, activities and experiences, and use the same materials as suggested at the end of the unit.



Pupils need experience in developing skills in working together

Use the materials to assist in developing lesson plans for health classes.

Find helpful information to make use of in the “teachable moments” or “teachable events”—a child’s cut finger, or a Red Cross blood collecting project in the community.

Pupil Participation.

The ability to live and work with others is basic to the pupils’ emotional, social, and physical development. Pupils need experiences in developing skills in working together on common interests and concerns. The most effective learning usually occurs when it has to do with the recognized needs of the learner. Opportunities for providing learning experiences exist in every grade or group. However, if these opportunities are to be fully utilized for learning, careful teacher-pupil planning is required for both individual and group activities.

1. What is teacher-pupil planning?

It is an activity which teacher and pupils plan together and which they themselves expect to carry out. In such an activity

the pupils have a chance to decide on purposes, things to be done, ways of doing them, materials to be used, people who can help, and some ways of evaluating.

2. *How much choice should the pupil have?*

This depends upon the previous experiences of the pupils and the type of activity being planned. For example, a second grade may decide to write a story about the milkman rather than the groceryman, when studying "community helpers." In this case the pupils have no choice in saying whether or not to study community helpers, but they may choose *which* community helper. In a seventh grade toward the end of the year, the pupils may have a much greater part in the planning. For example, the class may choose to take a field trip to the pasteurization plant. Before making the trip the class should be able to find answers to questions, such as:

Best time to go to the plant? (Pre-planning with management of plant.)

Best time to be away from school?

What parents will go on the trip?

Are there school policies governing pupils' activities off-campus?

What pupil will make the introductions at the plant?

What questions are the class members going to ask the plant director, and who will ask them?

How will experience be "followed-up" after the trip—discussion; individual "impression"; art; dramatization; tests; and sketches?

Who will write the "thank you" notes to the plant manager, the parents who helped with transportation, and others?

All of the above decisions will be made under the wise guidance of the teacher.

The experience of pupil participation in planning is important, even when the teacher has worked out tentatively most of the details ahead of time. However, the most benefit comes when pupils begin to gain experience in gathering the facts and in helping make decisions on the basis of the facts available.

3. *How to begin teacher-pupil planning when the pupils have had very little experience?*

In the beginning the teacher should probably plan most of the activities to be done. As the teacher becomes better acquainted with the group, pupils may begin to make minor decisions. For example, "Shall we read the same story today,

or would you prefer reading your own books?" The teacher may provide more and more opportunities for pupils to make choices in selecting activities and materials. All of these choices must be made within the framework of the policies of the school they attend, the grade they are in, etc. *The teacher never gives up the role as a guide and a leader.*

Teachers may find the following sources helpful in developing teacher-pupil planning:

Krug. *Curriculum Planning*. Harper and Brothers, 1950, pp. 200-203.
Noar. *Freedom to Live and Learn*. Franklin Publishing and Supply Company, Pennsylvania, 1948.

Lee and Lee. *The Child and His Curriculum*. Appleton-Century-Crofts, Inc., 1950.

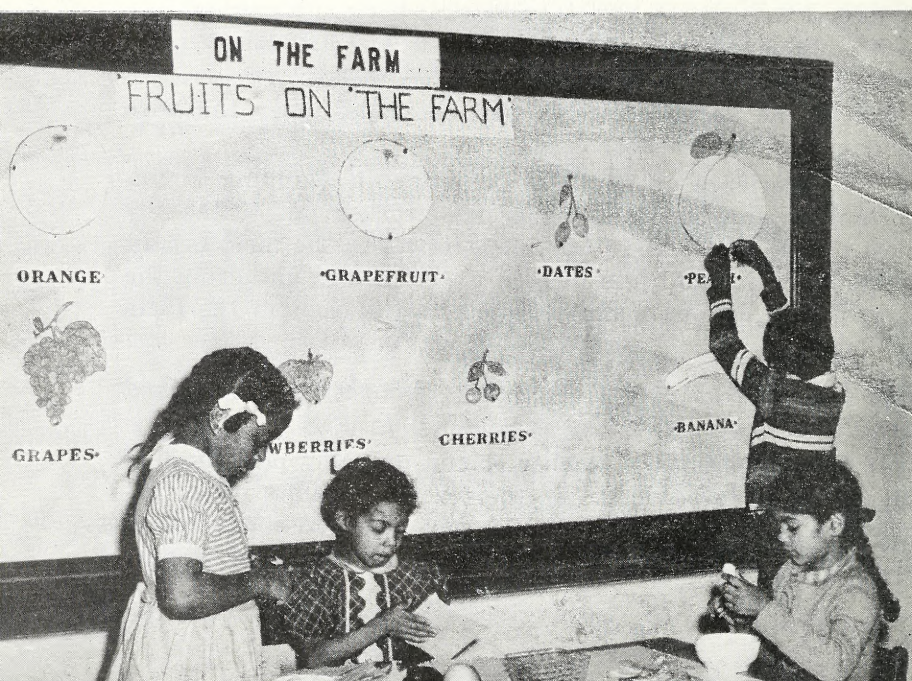
Stratemeyer, et al. *Developing a Curriculum for Modern Living*. Bureau of Publications, Teachers College, pp. 324-329, 1947.

Curriculum Development in the Elementary Schools. Board of Education of New York City, Curriculum Bulletin, 1945-1946 Series—No. 1.
Fostering Mental Health in Our Schools. ASCD, NEA. pp. 168-169, 1950.

Stratemeyer, McKim, and Sweet. *Guides to a Curriculum for Modern Living*. Bureau of Publications, Teachers College, Columbia University, New York. 1952.

Social Studies—North Carolina Public Schools. State Superintendent of Public Instruction, Raleigh, N. C.

Pupil participation in planning





Weighing and measuring may stimulate interest in growth

Educational Experiences in Health Services.

Teacher screening and observation and health examinations offer many opportunities for learning experiences for pupils. Those experiences will have real meaning and educational value only if pupils are provided opportunities to get understandings of the meaning of those procedures.

1. *Teacher Screening.*

Pupils should have opportunities to discuss the various screening procedures. For example, in eye testing they should understand what the test determines, the meaning of 20/20 vision, and the importance of taking care of the eyes. Weighing and measuring may stimulate an interest in growth and factors that determine growth.

2. *Health Examinations.*

The teacher and pupils should pre-plan for the health examination by discussing according to the level of understanding of the group:

- The purposes of the health examination.

- The parts of the body that will be examined.

- The various testing and laboratory procedures to be used.

- The need for pupil cooperation.

Following the examination the teacher should use the findings of the examination in individual guidance and follow-up. Group instruction should be planned regarding the major health problems revealed. The physician or nurse may be invited to discuss with the pupils the significance of the various phases of the examination and the importance of getting correction of defects and/or medical care when needed.

Health Guidance of Individual Pupils.

Through the various health services, observations, and other methods the health needs of individuals are determined. It is of little value to know these needs unless this knowledge is used. For example, the needs revealed may lead to a change in class activities, a change in physical arrangement, or a change in the individual's practices. Many cases will need the help of other professional personnel and the parent. A home visit by the teacher and/or nurse may be necessary. Individual conferences with upper grade and high school pupils will usually be helpful.

In many cases the teacher's part is most important in getting the pupil (getting parent to take pupil) to the person who can help him; usually this will be the family physician or dentist.

The practice of over-loading the pupil with "make-up" work when he returns after an illness needs to be discouraged. The pupil needs to regain his health before taking on any extra work. He usually needs less work after illness. *His most important job is to get well and regain his strength.*

Some Things the Teacher Is Not Licensed to Do.

The teacher should not try to diagnose what is wrong nor prescribe medical treatment. Only the physician does this.

For example, the teacher does not say that a pupil needs glasses just because he cannot read the Snellen chart. The teacher finds out to what extent the child cannot read the chart, reports this to the parent and/or nurse, and encourages the pupil to go to the physician for examination if the test so indicates. The physician makes the diagnosis and prescribes the treatment.

The teacher should not give a child medicine of any kind except at the specific directions of the physician. Neither should teachers keep aspirin or other drugs so the child may get them himself.

Teachers May Render First Aid and Emergency Care.

The teacher may, when qualified, administer first aid. (See Section on First Aid.)

Emergencies may occur when the teacher has to use his best judgment, even though he has had no specific training for dealing with the situation.

MATERIALS AND RESOURCES

Importance of materials.

Materials and aids cannot do the health education job, but they can be valuable aids. The teacher should be sure pupils have ready access to many up-to-date, attractive, usable, and scientifically accurate health materials, suitable to the maturity level of the pupil. It is the job of the teacher to select and secure any free materials which are needed. Also, it is important that he make known to those who are responsible for purchasing other materials needed. The materials should be listed, giving author, title, publisher, place of purchase, and price, if known. A copy of the list should be kept on hand for ready reference.

Sources of health education materials.

Lists of materials are included at the end of each resource unit and at various other places throughout this publication (See Index). There may be many more good materials that are not listed. Health education materials are produced by:

Publishing companies.

State agencies.

Voluntary and professional agencies and organizations.

Commercial companies.

The pupils and the teacher.

Visual Aids.

Films, filmstrips, slides, pictures, models, charts and other visual aids may enrich the health instruction programs when used under the wise guidance of the teacher. (See "Organization and Administration" section.)

Requesting health materials or information.

State name and give address where materials are to be sent. Give date or dates materials are desired.

Indicate 1st, 2nd, and 3rd choices, if substitutes are acceptable.

Indicate position of person requesting (1st grade teacher, science teacher, etc.)

Indicate specific topics for which materials are needed.

State purpose of material to ensure getting most suitable material.

Specify grade or group for which it is needed.

Instruct pupil who is requesting materials to give his name, name of school, grade, topic of the material needed, and to indicate whether it is for the class project or for his individual use. Only one pupil should write to the same place.

Materials and aids available in most schools.

Find out what materials and aids are already available in the schools, such as:

Health textbooks.

Supplementary books.

Library books, periodicals, etc.

Films, filmstrips and slides.

Graphs, charts, models (manikins).

Scales, light meter, room thermometer, Snellen Eye Chart, etc.

Free and inexpensive printed material.

Health rooms properly equipped.

Resource Persons.

Select the person because he can make a contribution to the class work at the time he is needed.

Inform him specifically as to what he is expected to do.

Let him know something of what has already been done, and what else is planned.

Introduce the person to the class. A pupil may do this.

Be alert to any gross deviations from a "normal" situation and help to remedy it. For example, in cases where the resource person discusses items which are far from what was suggested, or when the pupils begin asking "embarrassing" questions.

Don't turn the class over to any visitor or invited guest.

He is there only to serve as a resource person.

Don't bring a person into the class just because he is available.

If there is any question about inviting a person to the class, consult the principal, superintendent, or supervisor. Write, phone or thank personally, the resource person for his services. A pupil or committee of pupils may do this.

RECORDS AND REPORTS

Health records are essential aids to appraising, maintaining, and improving the health of boys and girls. They must be accurately kept. It does take time and effort to make them valuable tools.

Why Important?

No teacher can retain all health information about individual pupils in his mind. It must be written on some record.

What has happened to a pupil in the first grade may have great influence in helping him make decisions about his future when he is a senior. His first grade teacher will probably not be in the same school with the pupil when he becomes a senior. Therefore, the only way to make this information available in his senior year is through a written record. Somebody must make that record. Each person must fulfill his responsibility in each year's recording.

Who should make the records?

The teacher is responsible for keeping records up-to-date for the school and the nurse is responsible for keeping those needed by the health department. However, together they may decide which each will record. (See "Teacher Screening and Observation Manual," in the Appendix.)

Summary reports.

The teacher should make a summary of the achievements in his group to know what he has accomplished.

Using health records and reports.

As indicated above health records are kept for a purpose—to help know, maintain, and improve the health of the boys and girls. They are valuable aids to the teacher in planning health



Teacher-parent conference

instruction and in giving guidance to individual pupils. *Records are of little use unless they are accurate, kept up-to-date, and used.*

Records should be kept confidential. "Tommy's problems" or "Tommy, my problem" should never be discussed at the bridge table.

PARENT PARTICIPATION

Many teachers are finding that scheduled conferences between parent and teacher to discuss the activities of pupils are invaluable. The pupil's health and his health practices can be included as items to be discussed at such conferences. Sometimes this may be a teacher-parent-nurse conference.

The teacher may find it beneficial to have a meeting of the parents of the pupils in his grade or homeroom early in the year at a time when there are no other meetings at school. The teacher should help the parents understand the things the school and the teacher are doing to help the pupil gain health knowledge and improve his health practices. The teacher should get information from parents to set up the health practices to help the child develop desirable habits of:

Rest and sleep.	Dental health (visit dentist).
Adequate diet.	Bathing and "primping."
Safety.	Social relationships.
Personal hygiene.	Emotional health.
Cleanliness.	

Parents should be invited and encouraged to participate in some health activities of the class, such as helping with the Snellen eye test and weighing and measuring. Each parent should be given a specific job with good direction as to how to carry it out. Parents may be invited to take part in field trips for health purposes. They may help provide transportation to take children to clinics, dentists, or other places.

HIGH SCHOOL COURSES

The Ninth Grade Course. (See "Organization and Administration.")

There are some special problems which each person teaching 9th grade health should take into consideration in planning and carrying on the activities in health education:

1. The class is scheduled for only two days each week or on alternating days at the most. Only a few schools have a 5-days-a-week course. It *must* be kept in mind, understood, and accepted that pupils will not be expected to achieve in these two-days-a-week as much as they would in a 5-days-a-week course.
2. Pupils should understand at the very beginning of the course that certain days are scheduled for physical education and certain days are for health education. They should not be allowed to get the erroneous notion that they are being cheated out of physical education when they have a health education class.
3. In many schools the girls and boys are in separate classes. One of the chief reasons for this is that it is a better arrangement for the use of the physical education facilities. Opportunities should be worked out for boys and girls to carry on some activities together when practical.
4. This being the first year of high school many of these 9th grade pupils may need help adjusting to their new situation.

5. Problems of growing up bother many of them. Many girls in the 9th grade are much more mature than boys of the same age. The problems of boy-girl relationships due to differences of maturation is one that deserves attention. Ninth grade girls often want to date the boys in the 11th and 12th grades rather than boys in their own grade.
6. Acne (pimples) and other skin and hair conditions are paramount with many at this age.
7. Dental health is a special problem because of the great numbers of boys and girls who have dental defects.
8. Personal hygiene is a problem of this age in many cases—the girls during menstruation, for example.
9. Sleep and rest are very important to these fast developing young people. (See “Sleep, Rest, Relaxation and Recreation.”)
10. Boys and girls who are extremely fat, skinny, tall or short may need some special attention.
11. *How to be a member of the gang* is of major concern to the boys and girls and usually means much more to them than their parents or teachers believe.
12. Some 9th grade pupils may not have the problems listed here, but no doubt have others. The booklet “What Are Your Problems?” contains some helpful suggestions regarding problems of teen-agers.

(Life Adjustment Booklet, Science Research Associates, 57 W. Grand Ave., Chicago 10, Illinois.)

An Elective Course in the Senior High School.

In the elective course, designed to help senior boys and girls get information pertinent to preparation for adult living, the teacher or leader of the class usually draws heavily on the community resources and personnel for contributions. The following often serve as resource persons to help the teacher :

Minister.

Public health nurse.

Physician or health officer.

Pediatrician.

Guidance counselor.

Case worker from the welfare department.

Others depending upon the special interests of the group and what resources are available.

(Additional suggestions may be found in the "Resource Units.")

PROFESSIONAL IMPROVEMENT

It is especially important for the teacher to keep up-to-date on health information and problems. Health information is based on scientific discoveries and developments. These discoveries and developments are happening very fast. Information that was up-to-date last year may not only be out of date this year, but may even be inaccurate. (See "Organization and Administration.")

EVALUATION

Begins when needs are discovered and goals set up.

Is continuous.

Is for the purpose of determining group and individual growth.

Is for determining strengths and weaknesses.

Is in terms of goals and objectives.

Is democratic and cooperative.

Is done by all who are involved.

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12. Segel, David. *Frustration in Adolescent Youth*. United States Office of Education. Bulletin 1951, No. 1. Government Printing Office, Washington, D. C.
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MAINTAINING AND IMPROVING MENTAL HEALTH

A child is a UNITY. He is not a combination of a physique, an intelligence, and some emotions. There is a "oneness" about each of us which appears in each action which one undertakes. As you read these paragraphs all of "you" is involved—*you* think, *you* feel uncomfortable in your seat, and *you* are happy because the week-end is near. *Your* reaction to what *you* read is influenced by these and many other factors which constitute *YOU*.

Physical health and mental health are not separate phases of life. Health is *one*—a state of well-being which is experienced by the entire person. For example, during and following an illness caused by the action of bacteria or viruses within the body (influenza, for example), there is often an accompanying emotional discomfort which may exhibit itself in inability to make decisions easily. The entire person is reacting to the disease. Similarly, when you are considerably worried, there are often feelings of physical discomfort along with the emotional (headaches, tenseness in the neck muscles, perhaps). Again you react as a unit.

Why, then, is mental health included here as a separate section of this publication? There are two major reasons: First, in order to develop an understanding of the influence of emotions on the health of children and to emphasize the importance of this understanding until it is common in the thinking of all school people. Second, it is a little easier to include organized thinking about the emotions and health in a separate section. Note, though, that an attempt has been made to apply these understandings in the other sections of this publication.

SOME BASIC UNDERSTANDINGS

What is Mental Health?

A mentally healthy person is one who has a sense of well-being, who works and plays effectively and comfortably with others, who accepts human nature and imperfection in himself and others—most of the time.

A mentally healthy person is not without problems, worries, and unhappiness. He *is* able to encounter and to solve or accept



Painting provides opportunities for creative expression and desirable outlets for emotional tensions

his problems and worries without exaggerated discomfort over long periods of time.

How Mental Health Develops.

Most children are born healthy, with a strong resistance to illness and with an inborn direction of growth toward normal maturity. Given reasonably adequate environment and *comfortable relationships with people*, this growth takes place automatically.

The most important relationships of a child are with his family. These relationships are the earliest and the most influential on the mental health of the child. Before he attends school, the general pattern of his personality has developed. It will change throughout his life, but only within the broad limits which exist by the time of school entrance. That is, by this time a child is aggressive or timid, for example. During the remainder of his life he may become more or less aggressive or timid, but he is unlikely to change from an aggressive pattern to a timid one. If he is aggressive, he may at any time in life learn *slowly* to direct his aggressive energies into activities which are satisfying to him and to society or into activities which constantly get him into trouble. Usually, he experiences some of both.

In home relationships there are some factors which increase the child's ability to remain mentally healthy and to mature. The most obvious of these is love and affection. The second is independence and self-realization.

Being loved, wanted and accepted, even when bad, being helped and helping, being understood—the child who receives large measures of this constant, accepting affection is being helped to maintain his health and natural resistance to many diseases just as surely as when he is vaccinated for smallpox.

Every child, by nature, inclines slowly toward increased self-dependence. The home that permits and encourages this growth is providing a fundamental “nutritional requirement.” On the other hand, a home where excessive dependence on parents is encouraged and fostered, the child's growth is being stunted just as surely as if he received inadequate food.

There are other emotional needs which are important. They are usually received when the two mentioned above are supplied. References listed in this section include further discussion of emotional needs.

How Mental Health May Be Impaired.

Seldom does one incident or poor relationship have a serious effect on the growth of a child. On the other hand, constant, continued, nagging pressures usually have a strong, lasting influence. Following is a partial list of influences which *may* prevent normal growth and which *may* contribute to mental illness:

Lack of parental affection.

Overprotection by parents.

Failure of adults to accept normal childish behavior.

The frustration of being constantly faced with expectations, standards, or ideals which cannot be achieved.

Few opportunities in childhood to associate freely with other children.

Unrealistic viewpoint of many adults toward normal sexual factors in life and growth.

Frequent experiences of hostility from adults, particularly parents.

Insecurity, because of economic factors and the attitudes of others to either extremes of economic background.

Attitudes of others toward uniqueness in intelligence, in appearance, in dress, etc.

Poor nutritional status.

Glandular disorders.

Prolonged or frequent illness of the child or of his parents.

Separations, including divorce.

Death of a parent.

Membership in a minority group.

Placement away from home.

Membership in a migratory family.

It should be emphasized that, even when the above influences appear to be overpowering, a person has a strong natural resistance to illness, and this is reinforced and increased by relationships of affection and guided self-dependence. This resolute effort of the human toward improved adjustment is ever amazing.

Influences in the Community.

While the home is the most important influence on the child's health, many other forces exist in the community. The church, the health department, the neighbors, the organizations for children and youth, playgrounds—all of these and many others bring influences, sometimes conflicting ones, to bear on the child before he even enters school and during the remainder of his life.

The Place of the School in Maintaining and Improving Mental Health.

Teachers should be realistic, and thus avoid failure and frustration, by understanding at the start that the schools cannot and should not attempt to re-make personalities. The basic pattern of a child's personality is set before he encounters the school.

This does not mean that he will not change. The school can guide this growth within the existing pattern—toward satisfying and socially acceptable habits; toward self-realization; and can help him maintain his freedom from excessive feelings of fear, guilt, hostility, and competition.

It should be recognized that growth takes place slowly and that any one teacher may not expect to cause a child to produce startling changes in his behavior. Major changes do take place over many years of school and are influenced by many out-of-school forces. Yet this slow growth toward maturity which each teacher encourages and *helps* to guide does, over the years, result in mentally healthy people. The small contributions which teachers make from day to day amount, in time, to a major influence.

What Kind of Growth Should Be Encouraged?

Human growth toward maturity takes place through some known patterns of development. Each person grows at his own rate, both physically and emotionally.

To insure normal growth there are both physical and emotional needs which must be satisfied. Physical-emotional growth may be stunted when needs are not satisfied.

Between the ages of 16 and 24 years most people reach mature physical growth. Emotional growth may continue throughout life. Relative maturity is seldom reached before about thirty-five years of age.

People grow through the following interwoven patterns of emotional development:

From dependence toward a balance of dependence and independence.

From wanting and receiving toward a balance of receiving and giving.

From a self-centered existence toward a socialized enjoyment of life.

From a self-centered sex life toward a family centered sex life.

From ignorance and phantasy toward recognition and acceptance of reality.

Toward increasing flexibility and resilience in adjusting to change and the unexpected.

Toward increasing ability to direct hostile energies into harmless, productive, or self-satisfying activities.

Toward increasing self-acceptance and realistic self-confidence.

The accompanying chart roughly traces the normal development of emotional growth.

HOW SCHOOLS CAN FOSTER AND GUIDE EMOTIONAL GROWTH

Healthful School Living.

Schoolday experiences may promote or retard growth toward maturity. This is true from the first grade through the twelfth. It is true in the formal recitation period, in more informal group work, and in the relaxed atmosphere of the playground.

Children can learn to multiply, to read a newspaper, to be critical of radio commercials, and to plan a personal budget. As they participate in such activities, they can learn to understand themselves and to practice skills of relationships with others.

Mental health is maintained and developed by the *nature* of experiences which pupils and teachers have together—regardless

of grade level or content. *Direct instruction concerning mental health is secondary to the value of living in an emotionally healthful environment.* Three examples of such an environment follow:

*Second Grade.*¹ Sue attended a private school last year because she was too young to enter our first grade. This fall she came into the second grade with her cousin Mary, who is six months older. For the first few weeks Sue sat beside her cousin and seemed to feel that she must wait to see what Mary did before she could come to any decision.

In addition to the large tables there were two small desks in the room. Each child expressed a wish to sit at a desk. The children decided that there would be a change in the occupants of the desks each week. In a short time Sue's turn came to occupy one of the desks. Another child—not cousin Mary—was to have the other desk. Sue hesitated for a moment and then came to the new seat. Her decision to move seemed to give her a "bit of self-confidence".

This teacher was able to accept Sue as a timid child without feeling it necessary to push her toward more aggressive behavior. The teacher was understanding of the considerable issue that Sue faced when the time came for her to cut loose from cousin Mary. She also recognized the fact that this first evidence of self-confidence was a major step in gaining additional self-reliance.

Sixth Grade. The history lesson was concerned with Roman heroes. The teacher guided the discussion until it was suggested that the class divide into two groups and prepare dramatizations about Horatius and Cincinnatus. A time limit (20 minutes) was set for the planning period. Fifteen minutes was allowed for the two dramatizations. The children agreed on a leader for each group.

The teacher (with the principal's understanding) went to the teacher's room for 20 minutes relaxation. Group 1 remained in the room; group 2 went to the auditorium.

Group 1, under pupil direction, discussed the story of Horatius and selected scenes for dramatization. There were arguments and disagreements which were compromised. There were brief tryouts for some parts. One girl failed to be chosen to take the part of Horatius. She showed mild disappointment, but a moment later she was a soldier in a group scene. Props were quickly gathered from back stage—pieces of an old curtain for robes, a stick for a sword, some chairs, and a hoe (which, placed on the floor, represented the river). At one point several students noted that only five minutes remained for rehearsal and the work was speeded up.

Group 2 was going through similar activities in the auditorium.

¹This was originally prepared for *Growing Up In An Anxious Age*. Association for Supervision and Curriculum Development, 1201 Sixteenth Street, Washington, D. C. 1952. \$3.50. It is reprinted, with permission, from this book which is an outstanding one for school personnel who are interested in mental hygiene.

At the appointed time the teacher appeared and sat in the audience without a word. Group 1 presented a five minute pantomime accompanied by student commentary. This was followed by critical questioning and discussion concerning the acting, the historical facts, etc.

Group 2 then performed. This was also followed by questioning and comment.

Naturally, this activity reflects some months' work on the part of the teacher as she helped her students to develop independence, flexibility, socialization, self-confidence, etc.

High School. The principal stated that he had to be autocratic in order to get results. He cited unsatisfactory lunchroom conditions as an example. He agreed that autocratic edicts had not achieved results and decided to try another method. He appointed three teachers to a lunchroom committee. Students selected five student members to this committee. Here are some of the activities and results of the work of this committee:

1. A survey to determine what was desirable or undesirable about present conditions in the lunchroom.
2. A survey and discussion to discover the reasons for confusion, lack of use, and unattractiveness of the lunchrooms.
3. Cooperative activity, based on the home room organization, to:
 - Decorate the lunchroom and to change the decorations.
 - Help supervise the lunchroom activities of the younger children.
 - Inform all rooms, daily, of the menu.
 - Provide for student monitoring of lunchroom behavior.

Here faculty and students grew in facing reality, productive giving, flexibility, etc.

Some Basic Principles of Mental Hygiene Which Contribute to Healthful School Living.²

1. All behavior is caused—always. Frequently the causes of behavior are beyond the control of the child. It is difficult to understand all of the many causes of any one act of a child, but it is important to know that these causes always exist. Acceptance, understanding and tolerance follow when it is understood that children do not just decide to love, hate, or be indifferent.

2. There are wide variations in normal, acceptable behavior. It is so easy and so human to consider behavior which is comfortable to us as the only normal and good behavior. This results in a pressure on children to become alike—like we are. Children who learn slowly, come from "poor home backgrounds," wear

²Many of these ideas have been discussed at greater length and with examples from North Carolina Schools in *Growing Up In An Anxious Age*.

loud colors, talk loud, chew gum, and get dirty are as likely to be normal and acceptable as those who do not.

3. The teacher's personality and experiences influence his behavior toward pupils. For example, a teacher who likes his surroundings extremely neat may unknowingly put pressure on the children to act and feel in the same manner. This extreme neatness may be important for the teacher's comfort, but need not influence his judgments of pupils who feel comfortable without such extremes of tidiness. Many other types of *normal* childish behavior may come to be regarded as irritating and even bad, if the teacher learned as a child to think of them as bad.

A teacher's health, if impaired, may result in uncomfortable attitudes toward students. It is important for the teacher to enjoy a wide variety of social, physical, and mental activities outside of school.

Teachers feel a justified responsibility for the health and morals of pupils. Sometimes the mother instinct becomes so strong that teachers protect children too much—occasionally with an overpowering sweetness to which children must submit or feel guilty.

4. The human personality, by its very nature, grows in the direction of the best adjustment of which it is capable—within the limitations of its heredity and environment. Children *will* grow up. They *will* become adults, *provided they have an opportunity to associate with many people in a great variety of activities*. Once this is understood, much of the tenseness of teaching arising from a compulsion to produce immediate, complete learning will leave the teacher.

5. Perfection is a common human wish, but not a human trait. Standards of performance which are unachievable become frustrating influences which prevent normal growth—even cause illness.

6. One of the symptoms and one of the causes of poor health is unnecessary feelings of guilt. Some of these guilt feelings are aroused by the application of moral standards (good-bad; right-wrong) to activities which have no moral value. For example, loud talking, odd clothing, chewing gum, dirty hands, inability to read, low marks, etc., are neither morally good nor bad. Yet many children are taught that good children are clean and quiet,

for example. When they find themselves being dirty and loud they feel guilty—unnecessarily so.

7. The ability to face reality, even unpleasant reality, is important for health. Even unpleasant realities should be faced with children—the atomic bomb, labor-management problems, race problems, financial problems, pain, punishment, etc. If we do not, the very omission creates an attitude of secrecy, shame, or repugnance which may make it difficult for these children, when they become adults, to face these real problems. In simple words, children need practice in facing unpleasant realities and *necessary* frustration—in an atmosphere of friendliness and guidance.

8. People face difficult situations by fighting (attacking the problem in any of a number of ways) or by flight (escaping in equally numerous ways). An approving nod is given to those who fight or strive to attack a problem—"If at first you don't succeed, try, try again." Approval should continue to be given for efforts made, because this is usually the most satisfactory way to solve problems. On the other hand, a person who retreats or runs from a difficult situation is commonly regarded with shame, whereas, sometimes that is the only defense that a child (or an adult) can find when faced with an unbearable situation. There is need for the adoption of an attitude of acceptance and understanding toward flight, plus a willingness to help the child to cease retreating and to attempt to find some way of facing the difficult problem.

In moments of crisis children need to be supported rather than attacked.

9. Finally, it is neither necessary nor desirable to be too grimly serious about teaching and guiding children. Teachers and pupils who often have fun and laugh contribute to good mental health for each other.

The above ideas may be used as bases for faculty discussions. Here are some pamphlets which may be used in connection with discussions:

- Emotional Problems of Growing Up
- Fears of Children
- Getting Along With Others
- How To Live With Children
- Understanding Yourself

Why Children Misbehave

Science Research Associates,
57 W. Grand Avenue,
Chicago 10, Illinois.

Do Babies Have Worries?

Do Cows Have Neuroses?

Health Publications Institute,
Raleigh, N. C.

A Pound of Prevention

Teacher Listen, The Children Speak

National Association for Mental Hygiene,
1790 Broadway,
New York, N. Y.

Health Instruction.

Direct instruction, usually through logical reasoning, is not as effective in aiding children to grow emotionally as is the opportunity to experiment and practice skills of feeling and relating. Everyday activities in the school provide many opportunities in which children may practice these skills at the same time that they learn facts and intellectual understandings. The importance of a wide variety of types of activity as an aid to the encouragement of normal, satisfying growth has been mentioned.

Here are some examples of specific activities for indirect instruction which may provide practice in developing healthy attitudes and relationships:

<i>Activities for Indirect Instruction</i>	<i>Suggested</i>	
	<i>Grade Levels</i>	<i>Explanatory³ References</i>
1. Creative activities which are not teacher dominated: modelling, painting, dancing, etc. These lose much of their value when the teacher insists on guiding children in what to express and how to express it. The final result is far less important than the satisfaction of free expression.....	1- 8	1,3,5,7
2. Opportunities to be "messy" (particularly for young children)—finger painting, for example.	1- 3	1,3,6,7
3. Construction activities using blocks, saws, hammers, paper, wire, pipe cleaners, paper mache'	1-12	1

³These numbers refer to references listed at the end of this section which explain or give examples of the activities.

<i>Activities for Indirect Instruction</i>	<i>Suggested</i>	
	<i>Grade Levels</i>	<i>Explanatory References</i>
4. Natural freedom of movement around the schoolroom rather than a host of rules about pencil sharpening, getting books, etc. When activities other than lecture or question and answer are common, there is less need to maintain regimented order.	1-12	5
5. Tables (or desks in groups) which provide natural opportunities for group work, sharing, and socialization. Straight line seating where students look at the back of the heads of the other students is not productive of skill in relationships.	1-12	5
6. Participation in community efforts—clean up campaigns, school population surveys, discussion of local issues.	1-12	
7. Individual conferences between teacher and pupil. These might be used as a part of the evaluation process. The student may be helped to set up some of his own standards of achievement in arithmetic, for example. Later he might receive guidance in evaluating his achievement or failure to achieve. He might find it necessary to change his work habits or to shift his standards of self-expectation either up or down.	3-12	5
8. Welcoming and getting acquainted with new students. Learning their interests and skills and helping them to learn the customs of the school and community.	1-12	7
9. Practice in everyday competencies about which many sensitive people often feel self-conscious—using the telephone, operation of flush toilets (little children), how to swing a bat or catch a ball, etc.	1-12	
10. Opportunities for boisterous and unrestrained physical and vocal activity.	1- 8	10
11. Frequent shift in activities as a relaxation procedure—for teacher as well as pupils. Ten minutes of sustained attention is long for young children. Thirty minutes is long regardless of age.	1-12	
12. Use of the sociogram by the teacher for increased understanding of her group and the way individuals fit into the group.	3-12	5,14,16

Activities for Indirect Instruction

	<i>Suggested Grade Levels</i>	<i>Explanatory References</i>
13. Activities for the evaluation of advertising claims.	4-12	
14. Teacher example of the habit of recognizing and admitting mistakes without the need for feelings of shame and guilt.	1-12	
15. Collect, record, depict, dramatize superstitions. Do experiments to disprove. Example: Relative value of a penny placed on a foot scratch compared to antiseptic. Use of bacteria cultures with a penny on one and antiseptic on the other.	4-12	
16. Role-playing of problems of everyday relationships which arise at school or which children mention.	4-12	5,13
17. Puppet shows about problems, fears, how to act, etc.	1- 8	4
18. High school children assisting in the care of young children at lunch, at pre-school clinics, and the like.	9-12	
19. Musical activities which are enjoyable.	1-12	
20. Clubs and other organizations which provide opportunities for developing group skills.	4-12	7,12aa
21. Of particular importance in every grade are activities which provide opportunities for making decisions, planning, working on committees, assuming responsibility, compromising differences, etc. These may be used in teaching almost any subject.	1-12	5
22. Problem solving. Many immature people have never learned the skills of problem solving. These skills are not readily acquired in working arithmetic problems or in memorization. Rather they are learned in the more complex problems, such as are involved in sharing limited materials, organizing a club, evaluating the sanitation of the school, etc. Problem solving is learned slowly and should start with small problems in the first year of school, at which time a great deal of guidance is needed from the teacher. Problem solving requires at least the following practices:	1-12	12s, 12w, 12ee, 12aaa
Recognizing a problem and clearly defining the nature of it.		

<i>Activities for Indirect Instruction</i>	<i>Suggested</i>	
	<i>Grade Levels</i>	<i>Explanatory References</i>
Collecting information relating to the problem.		
Proposing a way(s) of resolving the problem.		
Tryout of the plan; revision; retrieval.		
Evaluation as to successful and unsuccessful practices.		
23. Studying individual children.....	1-12	16

As children grow in the ability to reason, it is possible to use direct instruction regarding emotional health. Here are some suggestions:

<i>Activities for Direct Instruction</i>	<i>Suggested</i>	
	<i>Grade Levels</i>	<i>Explanatory References</i>
1. Listing, discussing, dramatizing "things we are afraid of." Discussing values and dangers of fear; how fears develop; how to overcome fear.	4-12	2, 12b
2. Human Relations Classes in grades 6, 7, 8. The supervisor's handbook, "Developing Emotional Maturity", contains details about these courses.	6- 9	2, 12aaa
3. Activities about the growth differences between children of 12 and 16.....	7- 8	12cc
4. Developing and using self-rating of personality.	6-12	
5. Activities about "things that affect the way I feel and act.".....	4-12	12h, 12k, 12v, 12z, 12w
6. Activities about "things I don't like" or "things I hate.".....	5-12	16
7. Discussions about worry and ways of avoiding worry—such as making prompt decisions.	5-12	2,12s, 12v
8. Activities about day-dreaming and other ways of escaping from unpleasant realities.....	7-12	2,12v,15
9. Study of the interrelationships of emotions and physical condition.....	6-12	2,9,12v
10. Panel discussion — Desirable Personality Traits.	7-12	9

Activities for Direct Instruction

*Suggested
Grade
Levels* *Explanatory
References*

- | | | |
|--|------|--------------------------|
| 11. Study of local and State resources for mental health—existing and needed. Emphasize both maintenance, prevention, and treatment of the seriously ill. | 8-12 | |
| 12. Panel discussion on housing problems; on the fact that so many young people aim at professional jobs and that there are not enough openings for all of them. | 8-12 | 9 |
| 13. Discussion of childish and mature ways of facing and solving difficulties. This would vary with the general maturity of the group. | 6-12 | 9,12s,12v,
12w, 12aaa |
| 14. Assembly play, " <i>The Ins and Outs</i> ", about relationships among high school groups. Order from National Association for Mental Health, 1790 Broadway, New York, New York, Producing packet—\$2.00. | 9-12 | |
| 15. High school courses in sociology, psychology, human relations. | 9-12 | 9,12,15 |
| 16. Discussions of personalities in literature and the reasons for their behavior. Examples: effect of prejudice on Shylock; the reasons Portia is so self-reliant; normal feelings of the adolescent in <i>Seventeen</i> ; characteristics of family living in <i>Cheaper by the Dozen</i> | 9-12 | 8,11 |
| 17. Develop and teach units, such as:
How We Grow From Childhood to Youth
Understanding Ourselves
Developing a Happy Home
Getting Along With Others
Handling Strong Emotions | 6-12 | 9,12 |
| 18. Activities (dramatizations, debates, panels, discussions, surveys, etc.) concerning such ideas as:
Physical activity as an emotional safety valve.
Creative activity as an emotional safety valve.
Work and play as emotional safety valves.
How much of a family's income should go for rent? For a car?
Developing independence during adolescence.
Problems, causes, and some solutions for juvenile delinquency. | 8-12 | 9,12 |

Values and dangers of competition.

Religion and mental health.

Mental health opportunities and obstacles in our school.

How to work in a group.

Can you like a person even though you dislike his actions?

Practical ways of facing responsibility.

Practical ways of facing failure.

How can you disagree with an adult without becoming angry and without arousing anger?

Resources for Instruction.

In every community there are people who can help a teacher develop many of the above types of instruction. Some of them are: public health personnel, supervisors, doctors, welfare workers, ministers, recreation workers, librarians, police, parents, artists, musicians, personnel workers in industry, guidance counsellors, mental hygiene societies, mental hygiene clinics, home demonstration agents, etc.

Additional help is available from state-wide organizations, such as the School Health Coordinating Service, Raleigh; N. C. Congress of Parents and Teachers, Gibsonville; North Carolina Mental Hygiene Society, Box 2599, Raleigh; Mental Health Section, State Board of Health, Raleigh; Division of Instructional Service, Division of Special Education, Supervisor of Home Economics, Supervisor of Guidance Services—all of the State Department of Public Instruction.

Printed materials for use of children, youth and adults are plentiful in this area. The local supervisor has many listed in her handbook, "Developing Emotional Maturity." Additional lists on specific topics will be furnished by the School Health Coordinating Service on request.

Health Services.

Health services for the prevention or treatment of emotional disturbances are few in our schools, but there are some.

Special teachers of speech, remedial reading, etc. This work is administered by the Division of Special Education, State Department of Public Instruction.

Individual testing services of the State Department of Public Welfare are available as personnel limitations permit. Requests should be made through the local welfare department.

Mental Hygiene clinics. A list of mental hygiene clinics in the State will be furnished on request.

School psychologists. There are a few school psychologists in the State.

The School Health Coordinating Service can assist in setting up standards and job specifications for the employment of psychologists. Help can also be given in planning the work program for psychologists or other workers in mental health.

There are some things which the teacher can do in the area of health services. The Teacher Screening and Observation Record can help the teacher detect a few of the indications that a child needs some extra help in terms of his emotional life.

The two following publications are most valuable and simple to use in gaining an understanding of children with mild emotional problems. The second of the two pamphlets contains many practical suggestions for action which any teacher can follow.

Application of the Needs Theory To Education. In spite of the title this is a practical pamphlet to help in understanding children's problems.

Recognition of Emotional Needs: Dos and Don't For Teachers.

Both of these pamphlets may be ordered from Modern Education Service, Box 26, Bronxville, N. Y.

LIBRARY SUGGESTIONS

Professional Libraries.

There are many excellent publications concerning mental health. Twice a year supervisors and superintendents receive brief lists of new materials from the School Health Coordinating Service. The following three books would be a fine choice for the nucleus of a school collection on mental health:

Fostering Mental Health in Our Schools. Washington: Association for Supervision and Curriculum Development, 1950.

Growing Up in An Anxious Age. Washington: Association for Supervision and Curriculum Development, 1952.

Redl and Wattenberg, *Mental Hygiene in Teaching.* New York: Harcourt, Brace and Company, 1951.

High School and Elementary Libraries.

Life Adjustment Pamphlets. Chicago: Science Research Associates, 57 West Grand Avenue, Chicago, Illinois. Examples of titles: *Understanding Yourself, Getting Along With Brothers and Sisters, How You Grow.*

REFERENCES

The following references are referred to by number following the suggested activities for instruction. Each reference contains examples of the various instructional activities.

1. *Art In the Public Schools*. Publication No. 238, State Department Public Instruction, Raleigh, 1949.
2. Bullis and O'Malley. *Human Relations In The Classroom*, Course I.
Bullis. *Human Relations In The Classroom*, Course II.
Bullis. *Human Relations In The Classroom*, Course III. Delaware State Society For Mental Hygiene, 1404 Franklin Street, Wilmington, Del.
3. Cole. *The Arts In The Classroom*. New York: John Day Company, 1940.
4. *Dealing With Fear And Tension*. Washington: Association For Childhood Education International, 1952.
5. *Fostering Mental Health In Our Schools*. Washington: Association For Supervision and Curriculum Development, 1950.
6. *Helping Children Grow*. Association for Childhood Education International, 1200 Fifteenth St., N.W., Washington, D. C.
7. *Human Values In The Elementary School*. Department of Elementary School Principals, 1201 Sixteenth St., N.W., Washington 6, D. C.
8. *Literature For Human Understanding*. Washington: American Council on Education, 1948.
9. National Forum, Inc. 407 S. Dearborn Street, Chicago 5, Illinois:
 - a. *About Growing Up*
 - b. *Being Teen-Agers*
 - c. *High School Life*
 - d. *Discovering Myself*
 - e. *Planning My Future*
 - f. *Toward Adult Living*
10. *Physical Education in North Carolina Public Schools*. Publication No. 279, State Department Public Instruction, Raleigh, 1952.
11. *Reading Ladders For Human Relations*. Washington: American Council On Education, 1947.
12. Science Research Associates, 57 West Grand Ave., Chicago 10, Illinois: Better Living Booklets—For Teachers and Parents.
 - a. *Emotional Problems of Growing Up*
 - b. *Fears of Children*
 - c. *Guiding Children's Social Growth*
 - d. *Helping Children Understand Sex*
 - e. *How to Live With Children*
 - f. *Let's Listen To Youth*
 - g. *Overcoming Prejudice*
 - h. *Self-Understanding*
 - i. *When Children Face Crises*
 - j. *Why Children Misbehave*

Life Adjustment Booklets—for high school.

k. *Dating Days*

l. *Enjoying Leisure Time*

m. *Facts About Juvenile Delinquency*

n. *Getting Along With Brothers and Sisters*

o. *Getting Along With Others*

p. *Growing Up Socially*

q. *How To Live With Parents*

r. *How To Solve Your Problems*

s. *Making and Keeping Friends*

t. *Understanding Sex*

u. *Understanding Yourself*

v. *What Are Your Problems*

w. *You and Unions*

x. *You and Your Health*

y. *Your Behavior Problems*

Junior Life Adjustment Pamphlets—Grades 6-9.

aa. *Clubs Are Fun*

bb. *Getting Along With Parents*

cc. *How You Grow*

dd. *Life With Brothers and Sisters*

ee. *You and Your Problems*

ff. *Your Health Handbook*

aaa. *About You* (Units for high school classes)

13. Shaftel. *Role Playing The Problem Story*. National Conference of Christians and Jews, 121 E. 3rd Street, Charlotte 2, North Carolina.

14. *Sociometry In Group Relations*. Washington: American Council On Education, 1948.

15. Sorenson and Malm. *Psychology For Living*. New York, McGraw-Hill, 1949.

16. Taba et al. *Diagnosing Human Relations Needs*. Washington: American Council on Education, 1951.

PATTERNS OF GROWTH TO

MOST PEOPLE DEVELOP THROUGH THESE GENERAL PATTERNS

From (During Infancy) Through (at about 5-7) Through (at about 9-11)

Almost complete dependence on adults—for food, clothing, shelter, and most decisions.

Still relies heavily on adult help. Often finds it difficult to make choices and decisions. Needs reassurance from adults. Resists regimentation, but needs the security of a few fixed routines and schedules. Often fails to care for his own possessions. Has established independent habits of eating, sleeping, and elimination. May act as leader of a small group.

Slowly developing independence now more obvious. Readily accepts responsibilities—often needs reminding. Makes decisions rapidly (not necessarily accurately). Has positive likes and dislikes. Often rejects adult standards in favor of those playmates. Can handle an allowance. Beginning to take care of possessions.

A life of receiving—almost everything is done for him and given to him.

Interest is centered on his own wants. Wants his own way. Has little concern for the welfare of others. Is often selfish with his own possessions and with group property.

Awareness of and regard for welfare of others is growing rapidly. sensitive to criticism and anxious please. Enjoys working for the group. Regards for self continues, but balanced with concern for others.

A self-centered life—knows only himself—little awareness of his relationships with others.

Primarily concerned with himself. Plays and works alone or in small groups (3 or 4). His family is his most important social group. Often has difficulty in understanding his place in the large group of the classroom. Is just beginning to be aware of the feelings, and wishes of others.

Is now participating enjoyably in group work and play—most of with own sex. The "gang" is usually the dominant social group. Of belongs to a "club" which may be short-lived.

Ignorance of many realities—unaware of physical and social realities except in his immediate environment. Life becomes rich in phantasy which is not always distinguished from reality.

Imagination runs throughout his play activities. Is still confusing some of his imagination with real life. Often reasons on terms of what he wishes were true. Has difficulty in accepting criticism or in losing a game.

Imaginative activities are definitely distinguished from reality. Critical reasoning is beginning to develop. Self-evaluation and criticism noticeably developed. Aware of the personality of others. Has increased ability to do things he does not like. Usually accepts deserved blame. Has some awareness of social problems. His vocational plans are growing more realistic.

D EMOTIONAL MATURITY

EMOTIONAL GROWTH (In the Absence of Prohibiting Factors)

rough ◀ (at about 12-15) Through ▶ (at about 16-20) Toward ◀ Maturity

From the onset of adolescence the development of independence becomes more obvious and more desirable to the youth and adults have relationships with him. Often rejects adult authority. Starts to choose own friends. Opinions and standards of his age group often more important than those of parents and teachers. Is capable of detailed individual planning and action. Often slavish conformity with group action. Often has difficulty making decisions.

Independence continues to develop. Becomes more individualistic and more critical of ideas of his group and adult standards. Wants and plans for economic independence. Desires for and achievement of independence from family group makes rapid progress. Makes decisions rapidly.

Relatively independent in thought and action—usually makes own decisions. Economically independent. Sets up own family. Permits and promotes development of independence in own children. Capable of expressing criticism of and opposition to plans or activities with which he disagrees.

Showing ability to defer his own immediate desires and to contribute to group welfare. Wants to contribute to family welfare. Enjoys living. Has high regard for values which, in his opinion, contribute most to welfare of his community and country. Often extremely idealistic concerning welfare of society.

Characteristics of 12-15 continue. Strong interest in social, economic and political problems—often with impatience for improvement. Shares activities and possessions readily. Tries actively to contribute to group welfare.

Produces for the welfare of self and others—with accompanying enjoyment. Often enjoys giving of his time and energy—without extremes of martyrdom. Finds pleasure in his occupation. Finds pleasure in working and playing with his family and friends.

Group of boys and girls becomes dominant social group. Has an intense desire to be accepted by the group. May have spells of withdrawal, showing off. Has a deeper awareness of own family and loyalty to it. Strong. Broadens extent and variety of recreational and social activities.

General characteristics of 12-15 continue, but are less intense. Becomes more individualistic.

Pleasurable socialization — Functions as a member of many groups. Enjoys group endeavors and accepts responsibility toward group. Has socially acceptable goals and ambitions. Can subordinate own desires to group welfare. Can accept leadership or be a loyal follower.

Critical reasoning and ability to make casual relationships well-developed. Imagination is centered on himself, his thoughts, and his actions. Day-dreaming is prevalent. Spends much time in self-analysis. Apt to be disturbed by ordinary physical or personality defects. Apt to be superstitious. Critical of adult ideas and beliefs. Apt to be idealistic in moral and social beliefs.

Gradual growth toward maturity. Is actively trying to adjust his idealistic standards to observed realities of life.

Recognition and acceptance of reality—usually guided by facts rather than by emotions or superstitions. Recognizes gaps between his ideals and existing conditions. Accepts his inability to change many of these conditions. Has a reasonably accurate evaluation of his own behavior and abilities. Usually recognizes and allows for influence of emotion on reason.

Patterns of Growth--Continued

From ➡ (During Infancy) Through ➡ (at about 5-7) Through ➡ (at about 9-11)

Resilience in adjusting to change and unexpected happenings. Easily adjusts to change provided he has a firm base of security and love.

Often insists on his own way and on fulfilling his own desires. Frequent shifting of those desires. Finds difficulty making and accepting decisions involving choices. Has accepted the cultural pattern of his home. Has some difficulty in adjusting to the new patterns of life at school. Can easily be pressed into an inflexible attitude toward life and people. Adjusts with ease to change and the unexpected provided he has a firm base of security and acceptance at home and at school.

Considerable flexibility in breaking of interests and activities. Has adjusted to patterns of school life and social groups. Makes decisions easily. Accepts changes in routine without unexpected success or failure. Gives reasonable emotional responses. Give in to the wishes of the group. Can work on big problems with flexibility in altering approaches and methods for solution.

Sexual life centered around oral (sucking) activities and affection toward adult who cares for him.

Has an active interest in sex—origin of babies, birth, etc. Is aware of differences in sexes. His attitudes and inhibitions vary according to those of his parents. Should be able to accept simple and accurate answers to his questions without feelings of shame and guilt. May take part in mild sex play. Finds humor in bathroom words and activities. Beginning to play predominantly with members of his own sex.

Indifference or antagonism toward opposite sex is common. Interest has shifted from elimination to direct sexual implications—organs and functions. Actively seeks detailed information—from books, pictures or friends, if parents do not satisfy his interest for knowledge. May be childhood romance.

Hostile feelings expressed openly and directly.

Often aggressive in behavior and in speech. Is often quarrelsome. Temper tantrums are not uncommon. Blinking, coughing, biting fingernails, leg swinging, use of expletives, etc., are sometimes indications of suppressed hostile feelings toward self, toward others, or toward a piece of work.

Has little control over the expression of his anger. Is easily angered by incidents which appear minor to adults.

Becomes more subtle in releasing energies of hostility. Boys often wrestle and push. Muttering and fault finding is more often directed toward the specific cause of anger. May "work off" hostile energy by play or work tasks. May transfer resentment toward parents to hostile words or acts toward teachers or classmates.

Self-acceptance is characteristic from birth throughout life—provided the individual seldom meets situations which produce deep feelings of shame, guilt, inferiority, etc. Realistic self-confidence seems to develop naturally—provided the child experiences a balance between success and failure, with emphasis on success. But all children do, too frequently, experience shame, guilt, fear, and failure. Some of the types of activities which may produce excessive feelings of fear and guilt, inferiority

Fears and worries are often concerned with imaginary situations—fear of the dark, of abandonment by parents, of dreams, of queer people, of ridicule.

Fears are often connected with supernatural—ghosts, skeletons, mysterious happenings.

Fears in school—failing, later poor report cards, not doing as well as other children.

The facts contained in this chart are taken in part, from: Cole, *Psychology Of Adolescence*, Rinehart; Gesell and Ilg, *The Child From Five To Ten*, Harper and Brothers; Hurlock, *Child Development*, Knott.

Through (at about 12-15) Through (at about 16-20) Toward Maturity

often a rigid code of behavior which may not tolerate other codes. He rejects home, school, community standards—temporarily. The child is often inflexible in its demands. Many question earlier religious beliefs. Many find it difficult, at times, to adjust to physical and emotional growth.

Increasingly able to adjust to the unexpected. Tolerance toward others and toward home, school and community pattern increases. Able to adjust with reasonable ease to serious happenings.

Flexibility of adjustment — can usually accept good and bad, success and failure with reasonable emotional reactions. Adjusts readily to new surroundings. Usually tolerant of beliefs and actions of others. Often changes own beliefs on basis of facts. Is guided, generally, by ethical and moral standards of his community.

beginning interest in opposite sex. Intense, brief, intense "fallings in". Widening and deepening interest in all phases of sexual development. By 14, 50% of boys and of girls have matured in the ability to reproduce. Masturbation is common and a frequent unnecessary cause of emotional disturbance. May rush on same sex.

Definite interest in opposite sex grows toward courtship. Great interest in ethics of relationships between sexes. Interested in how to choose a mate and how to have a happy married life. By 18 almost all are mature in ability to reproduce.

Relatively satisfactory sexual adjustment centered in family life—Married and a parent. Enjoys family life. Accepts sex as normal, enjoyable factor in life. Free from exaggerated feelings of guilt and shame. Provides for normal emotional development of children.

often releases hostile energy through talking, restlessness, going on a walk, violent exercise, refusing to talk to source of anger. Anger often connected with social, personal things and situations.

Verbal release most common. Growing in ability to apply energy to produce or create something.

Frequent direction of energies of hostility into productive or harmless channels—able to recognize feelings of hostility; often able to use the energy aroused by these feelings in productive work. Able sometimes to guide these energies into work or play which creates evidence of affection for the person who was the source of anger.

sm. and excessive competitiveness are listed in this bulletin. By eliminating many of these frustrating factors the child has a better opportunity to retain the self-acceptance and self-confidence with which he is born. It is probable that a person who develops through the seven patterns above will be free from these excessive feelings.

Years are often connected with—social incompetence, school exams, automobile accidents, disease, inadequate funds, getting a job, loss of job by parents, of being sinful, of sexual experience, of moral crises.

DEVELOPING WHOLESOME LIFE RELATIONSHIPS

At sometime in his life every person is a member of a family group made up of males and females. He needs to acquire knowledge and develop understandings of how to function successfully in that family group.

This section is concerned with helping the school child be a successful member of his family group now and to help prepare him to accept and fulfill his responsibilities in the future as a parent and adult. This includes learning how to develop good relationships with his own sex, with the opposite sex, and with all ages and groups.

In the school program from first grade through the twelfth, it is important that all phases of developing wholesome life relationships (mental, emotional, moral, physical, social, economic) be considered in their interrelationships. However, the materials in this section are directed toward those special problems of growing up as a boy or as a girl and getting along successfully with the opposite sex.

The school should recognize that the home is the proper place for guiding children in acquiring knowledge, including specific information about sex, and developing wholesome attitudes about family living. However, it is generally agreed that many homes need help in carrying out this responsibility.

Learning takes place outside the home and school as well as inside these institutions. Much of this "outside" learning is likely to be unscientific and unwholesome. It is, therefore, the function of the school to provide the child with definite opportunities, as a part of the regular school program, to acquire scientific knowledge about growing up under wholesome conditions.

Information about developing wholesome life relationships is concerned with guiding the individual through the normal pattern of development from birth to maturity including his development as a boy or as a girl.

The general objectives for developing wholesome life relationships are:

To provide guidance to boys and girls in acquiring knowledge concerning the normal body changes that characterize sexual maturation.

To provide guidance in the development of emotional acceptance of sex as a basic life function.

To provide guidance in the development of socially acceptable attitudes and patterns of behavior with regard to growth and development.

GUIDING PRINCIPLES

1. The home is the major and natural source for information about family life and sex development. The church plays a major role in this function in some groups. The school has the responsibility of complementing and supplementing what the home has provided.
2. School programs should be planned in cooperation with parents, parent groups, and other community organizations, such as health, welfare, church and family life coordinating agencies.
3. The school should accept its responsibility for helping parents in the guidance of children in problems of growing up.
4. The school should cooperate in community programs designed to give information about human development and should accept its responsibility for intelligent leadership and direction, when needed, to assure effective results.
5. "Sex education should be integrated with the total health program at all grade levels"¹ and should be taught by the regular teacher with the usual class groupings.
6. The school should provide individual guidance as well as class instruction to boys and girls in the acquisition of scientific knowledge and the development of wholesome attitudes in regard to growth and development as boys and girls.
7. Opportunities should be provided for school personnel and they should take advantage of all their opportunities to:
 - Acquire scientific knowledge.
 - Develop wholesome attitudes.
 - Acquire the use of a scientific vocabulary.
 - Acquaint themselves with questions (and answers) which children would likely ask.

¹Health Education, American Medical Association and the National Education Association, 1948.

Feel secure in beginning and carrying on a program by having knowledge and having the support of administrators, other teachers, and the community.

Understand that certain personal problems of the child should be considered in private conferences.

8. Growth and development including sex education should be treated in a very realistic, normal and dignified manner.
9. The normal mixed groupings are usually preferable except when, in the judgment of the instructor, it is indicated that topics peculiar to one sex or to a certain age group call for separation of the sexes.
10. The teaching approach and the content of the program should give due consideration to the present understanding of the group.

TEACHING SUGGESTIONS

As in all areas of health education, many of the things that are emphasized in the primary grades will of necessity continue throughout the entire school life of the child. The way they are emphasized in succeeding grades will depend upon the recognized needs of the children, their interests, the type of community in which they live, and resources available to the teachers. The teacher should consider the above in using any of the following suggestions to plan the health program.

GRADES 1-3

Objectives.

1. To help children develop wholesome attitudes toward themselves and other people and toward life processes. For example:

To get along with members of their own group—their peers.

To get along with members of their family, their teachers and other adult or younger age groups.

To develop an appreciation for parents and to learn their contributions.

To study inheritance—"Eyes like father," "blonde like mother," etc.

To realize that every animal has a father and a mother.

2. To create an atmosphere in which children will feel free to ask questions. For example, questions about such things as self, opposite sex, new babies, where babies come from, and life activities of animals.
3. To help the child acquire and use understandable scientific terms concerning the human body and its functions.
4. To help the individual in developing a feeling of "worth-whileness."
5. To help boys and girls develop competencies necessary to become accepted by others.

Activities.

1. Participate in mixed group activities, such as play activities, physical education activities, parties, picnics, field trips. (See Physical Education for North Carolina Public Schools, State Department of Public Instruction, Raleigh, North Carolina.)
2. Discuss the generosity of a father (when child has new bicycle or other items).
3. Help children make plans for a family party.
4. Give individual guidance (or small group discussions) to a child who has some problem, such as:
 - Expecting a new baby in the home.
 - Trying to adjust to a new baby in the home.
 - Adjusting to a new father or mother when one parent has remarried after a divorce or after death of either parent.
 - Learning to live without one parent (through death, divorce, separation).
5. Dramatize family activities. For example: family picnic, dinner, getting ready for breakfast.
6. Orientate to the proper use of the toilet. This should include the use of understandable scientific terms, and the proper care of the person. (Refer to section on Personal Health Practices.)
7. Study and observe the care of pets at home, in the school, at a neighbor's house, in the zoo, in pet shops, or in a museum.

8. Have group discussion about:

Birth of a baby brother or sister.

A new family of pets.

New calf or colt or other baby animals on the farm.

Evaluation.

1. To what extent does *each* child like to play and work with groups of both sexes, with younger children, and with adults?
2. To what extent has *each* child asked questions about himself or about life processes of animals and people? To what extent have all questions been answered simply and sincerely?
3. What evidences are there that *all* children are developing a usable scientific vocabulary?
4. What evidences are there that *all* children feel secure in their groups?

GRADES 4-6**Objectives.**

1. Review of objectives in grades 1-3.
2. To develop a sense of responsibility as a member of the family and as a member of the school and community.
3. To develop an understanding of the contributions of both sexes to society.
4. To prepare children to understand and accept the emotional and physical development (puberty) which often occurs in many girls by the end of the 6th grade and in a small per cent of boys.
5. To develop an understanding of the life cycles of plants and animals.
6. To stimulate interest in conforming to socially accepted standards of courtesy and good grooming.

Activities.

1. Continue activities listed in grades 1-3 when necessary to meet the needs of this group.



Working effectively in mixed groups

2. Work effectively with others through participation in some activities of mixed groups in clubs and committee groups in school and community. Participation in mixed groups helps the individual develop appreciation for the contributions of the opposite sex and helps him learn to feel at ease in the presence of the opposite sex.

Examples:

- Teacher-pupil planning group.
- School health councils and committees.
- Safety patrol.
- Junior Red Cross.
- Scouts.
- 4-H Clubs.
- Church organizations.

3. Role playing to emphasize the contributions and interdependencies of members of the family.

Considerations *for* rather than antagonism *against* members of the opposite sex.

Contributions of family members. For example, point out the fact that the mother contributes directly to the financial status of the family through her work in the home.

Calculation and study of cost of maintaining a home encourages children to recognize the value of health, time, money, clothing, etc.

4. All questions whether casual or motivated should be answered truthfully by the teacher (or referred to a reliable source) in an impersonal and unemotional manner.
5. A discussion of various radio programs in which children take a part may help children compile a list of characteristics they desire in boys and girls.
6. Children may invite their parents to school, introduce them, serve refreshments, etc. Before such an occasion good manners, introductions, etc., may be discussed in class.
7. Study films, charts, and filmstrips dealing with elementary anatomy of the human body.
8. Committees or individuals may trace the pedigrees of famous race horses, sheep, cattle, hogs, dogs, and rabbits.
9. Child may bring pedigreed pet to school and explain what pedigreed means.

Evaluation.

1. Do children treat topics about the body and its functions as natural subjects or do they show embarrassment or "giggle"?
2. What evidences are there that all children use scientific terms?
3. What evidences are there that students show consideration for members of the opposite sex?
4. In what ways do continuing questions show evidence of previous satisfactory answers?
5. To what extent are obscene terms and undesirable notes and wall markings in rest rooms present or absent?
6. To what extent and in what ways does each child assume responsibility as a member of the school group?
7. How many kinds of childhood activities do the children enjoy?

GRADES 7-8

Objectives.

1. To continue to provide opportunities that will help the individual develop a feeling of "worthwhiieness," a feeling of belonging, and the competencies needed to feel secure with others.

2. To provide opportunities for boys and girls to acquire additional knowledge about growing up, reproduction, and inheritance.
3. To help boys and girls understand and accept emotional and physical changes as a part of normal development.
Example:
 - a. Body changes in both boys and girls.
 - b. Brief periods of worry, depression, or restlessness.
 - c. Menstruation and other secondary sex characteristics.
 - d. Nocturnal emissions, and voice change, appearance of a "mustache," etc.
4. To develop an understanding of and appreciation for the "family" in general, for his own family in particular, and for his changing status in his family.
5. To develop wholesome boy-girl relationships.
 - a. Understanding of self.
 - b. Opportunities to participate in mixed group activities.
 - c. Understanding why and in what respect girls are usually more mature than boys at this age.
6. To emphasize the importance of good personal health habits, such as grooming, dental health, nutrition, rest and exercise in building attractive personalities.

Developing wholesome boy-girl relationships



7. To provide opportunities for cultivating interest in various activities in work, play, and hobbies.
8. To provide guidance in choosing reading materials covering sex development, family life, and related fields.

Activities.

1. Planned discussions following teacher-pupil recognition of problems pertinent to the group at this stage of development as determined by:

Self inventory.

Fears.

Behavior.

Teacher-pupil conferences.

Interest questionnaires.

Diaries.

Sociograms.

Current happenings.

Question box—problems may be identified by encouraging pupils to write questions on a piece of paper and drop them into a “question box.” The teacher should *always* take a day or two to look these over before answering them or having them answered. This gives the teacher time to prepare himself for answers if he needs to do so. Questions should be unsigned. Some of the problems or interests that may be expected are:

How do you ask a girl for a date?

What are some things you can plan to do on a date when you have no money?

Why do my parents make me come home by 10:30? Don't you think I should be allowed to stay out longer?

Why do I have so many “bumps” or pimples on my face? Will they clear up?

What causes twins?

Why are babies deformed?

Will I ever grow any larger (small boy)?

What is the Rh factor?

Why are girls more grown-up?

Why do girls want to have dates with the seniors rather than with us?

2. Encourage boys and girls to read authentic and attractive reading material—library books, pamphlets, booklets appropriate to the developmental stages of the individual.
3. Use visual aids—films, filmstrips, slides, charts and pictures—when related to class discussion.
4. Make a “job analysis” for each person in the family. (This

may be done by individual members of the class, by committees, or as an activity of the whole group.)

5. Have individual conferences with the teacher concerning problems. (It is important that time and a place be provided.)
6. Encourage participation in recreational activities—with all family members and with other groups.
7. Discuss plans for a school dance or other social functions—including courtesies and customs during, before and after the dance.
8. Encourage participation in after-school, school-sponsored activities (band, glee club, sports event, etc.)
9. Plan lunchroom social activities during the regular lunchroom period.
10. Trace the history of the family as a unit and as a social institution. (This may include the family unit in other countries.)
11. Discuss the advantages of belonging to a family.
12. Permit a child who has attended a wedding to relate the events and discuss them in class.

Pupil committee at work



13. Estimate the cost of raising a child to 18 years of age (or 21 years of age). This may be a research project for one committee.
14. Organize groups or carry on class discussion to study growth characteristics of their own age groups—to understand why most of the girls are more “grown-up” than boys—and why they want to associate with older boys.

Briefed from a report of one eighth grade teacher.

I'm still “sold” on the idea of teaching the “facts of life” in the eighth grade, even if they haven't been taught before. Of course, I am fortunate in having the *cooperation* and *approval* of my *principal* and *parents*. The pupils look forward to learning about themselves.

Early in the year I gave the girls the booklets “From One Girl to Another,” and “Growing Up and Liking It,” and showed the film on “Menstruation.”

We took a great deal of interest in height and weight increases during the past months and took special notice of “Voice Changing,” “Adam's Apples,” and “Whiskers,” since the boys were growing up.

Here is an idea that I believe should be stressed among instructors. Only a person who is a thoroughly mature *adult* is qualified to give sex instruction. As you know, there are many people who think childhood is the happiest time of life and would like to be “frozen” at 10 or 12 years of age. Only those who believe it is better to be 40 than 14 and that “the best of life is yet to be” are able to lead children through a happy adolescence to a happier maturity. Instead of weeping because a boy or girl is growing up, I believe we should rejoice with him or her at each progression.

This year I taught the reproductive system as a natural sequence of all other systems of the body—with due appreciation of each. We used many materials and read the book *Being Born*.

I gave a running account of “How You Came To Be,” including the early visit to the doctor by your mother, development of you in your prenatal period, care of the mother, anticipation of both parents for your arrival, their pleasure at your arrival, the shock of coming from a 98.6° temperature to a 70° temperature, the warmth of the love of your parents and your

fortune of having loving parents who thought then and still think you are wonderful.

Evaluation.

1. Do pupils use scientific terms?
2. Can pupils discuss normal functions of the human body without a sense of shame?
3. Is there an absence of undesirable notes and obscene terms? For example, those written on the walls of the toilet rooms, etc.
4. Do boys and girls feel at ease and enjoy working in groups of boys and girls?
5. Are there evidences of the practice of boy-girl relationships appropriate to their age?
6. Are there signs of maturation in behavior? (Refer to chart in "Maintaining and Improving Mental Health.")

GRADE 9

Objectives.

1. To provide experiences which build feelings of social competencies.
2. To provide opportunities for the boys and girls to acquire knowledge concerning the human reproductive system.
3. To develop a wholesome attitude toward the responsibilities and privileges of parenthood.
4. To develop in the individual a responsibility for his or her own behavior.
5. To develop responsibility for the conduct of others—that is to give personal approval to the observance of socially accepted standards on the part of others.
6. To help boys and girls formulate and accept sound principles and practices in social relationships.
7. To meet individual needs of boys and girls through personal and group guidance.
8. To help boys and girls become acquainted with resources and contributions of community agencies.
9. To develop an understanding and appreciation of the value of the family unit in our social structure.



Developing an understanding and appreciation for the contributions of different members to the family

Activities.

1. Discussions concerning problems, interests, and topics such as :

Manners.
Grooming.
Dating.
Choosing and keeping friends.
Courtship.
Menstruation.

Anatomy and physiology of the reproductive system.
Body developments.
Nocturnal emissions.
Fertility.
Responsibilities of a "baby sitter".
(This could be developed by a group)

2. Reading reliable reference materials—books, pamphlets, periodicals, etc.
3. Using visual aids—films, film strips, slides, charts, graphs, models—as aids to group discussions.
4. Panel discussions.

Sample topics:

Family recreation.
Cost of medical care for the family.
Courtesy and manners.
Role of members of the family—father, mother, brother and sister in a happy family life.

5. Class or committee of class members may analyze and discuss causes of lack of harmony in the home.

6. Have a panel from the class discuss problems presented by the class or by others concerned (parents, teachers, etc.). "Mind Your Manners" over the National Broadcasting Company Network is an example of such a program.

7. Committees or class as a whole may do research (in literature and with resource persons) and formulate standards of conduct concerning:

Manners and customs at parties and dances.

Desirable traits expected in wife or husband.

Amount of money a boy should expect to spend on a date.

Should 9th grade boys and girls have regular dates?

During week-days? During week-ends?

Responsibilities of the girl (or boy) to help plan things to do on a date:

Go skating.

Play records.

Go to a show.

Plan recreation with the family.

Go to a dance.

Go on a picnic.

Conduct at the hamburger stand or drive-in grill after the ball game or other school function.

8. Role playing or demonstration of good manners.

Boy and girl, or boy and mother walking down the street.

Boy and girl going to the movies.

Boy and girl going to the grocery store.

Teacher and pupil leaving the classroom.

Boy calling at the girl's home. The girl is not ready to see him. Her father, mother, and other members of the family are in the living room.

9. Getting acquainted with community resources through student committee surveys, interviews, conferences, etc.

Health Department.

Clinics (prenatal, well baby, pre-school).

Premature infant care.

Welfare agencies.

Adoptions.

Supervision of children's homes.

Church.

Counseling.

Recreation.

Kindergarten and nursery school.

Recreation department.

Crafts.

Sewing classes.

Sports.

Courts.

Divorce.

Juvenile.

10. Participation in recreational activities—sports, folk and square dancing, hobbies, crafts, music and art, and family recreation which should include all members of the family.

The following section was briefed from a study in personal hygiene done by a 9th grade girl's physical education class:

The keen interest of the girls in their personal and social growth helped to change the course of the unit. The teacher had participated in a two-day conference on "Education for Responsible Parenthood" the previous year.

Following is a list of some of the topics they developed:

Evaluating personal hygiene.

Personal inventory of understandings and practices during menstrual period.

Comparison of adolescent period of boys with girls.

Boy-girl relationships.

Reasons for popularity or lack of popularity.

Discussions with the class of boys concerning:

Maturity.

Dating.

Unmarried mothers.

Plans for improvements.

Evaluation.

1. What evidences are there that the pupil takes some responsibility for his own behavior? For the behavior of others?
2. To what extent have all boys and girls increased their knowledge concerning human growth and development?
3. What evidences are there that each boy and girl has worked out some of his own problems with help from the teachers and others?

4. How much reliable reading materials do pupils use?
5. How many of the "activities" listed above are participated in by students?
6. What recreational activities are participated in by students?

Contributions to wholesome life relationships are made in the 9th grade through home economics, agriculture, social studies, physical education and through various other school and community activities.

GRADES 10-12

Instruction and guidance in the problems of growing up and getting along together in grades ten, eleven and twelve should be re-emphasized. Guidance to boys and girls should be provided by the guidance counselor and by the home-room teacher.

The place for specific instruction about growing up, including sex education, depends upon the organization and the curriculum of the school, but somewhere in the curriculum this phase of education should receive appropriate emphasis because the students of these grades are approaching manhood and womanhood.

Where a course is offered in the senior high school, it should be planned jointly with teachers of other subjects. The suggestions listed below and those in the section on "Preparation for Marriage and Homemaking," in the *Homemaking** bulletin should be of help in planning such a course or planning a program where no special course is offered.

In schools which do not offer health as a special subject in grades ten, eleven, and twelve, it is important that teachers of home economics, biology, agriculture, physical education, sociology, economics, and others concerned with health instruction and guidance should plan the program jointly to see that sex education as well as other health areas are adequately covered.

Subject area courses where family life education may receive some emphasis:

<i>Tenth Grade</i>	<i>Eleventh Grade</i>	<i>Twelfth Grade</i>
Biology	Home Economics	Social Studies—Economics and Sociology
Home Economics	Agriculture	Agriculture
Agriculture	Social Studies—	Physical Education
Physical Education	U. S. History	
	Physical Education	

*A Guide to the Teaching of Homemaking in North Carolina, 1949, State Department of Public Instruction, Raleigh, N. C.

Objectives.

1. To develop a knowledge and understanding of changes in body structure and their resulting social implication.
2. To develop an appreciation for pupil's family, church, school and community.
3. To do definite planning for preparation of students to accept the responsibilities of marriage and parenthood.
4. To provide opportunities for boys and girls to participate in co-recreational activities (See physical education bulletin).

Activities.

1. Discussion topics including needs and interests secured in various ways. (See Grade 9—Activities #1)
2. Conduct a project on getting acquainted with community resources (See grade 9). Discussion of specific resources.
3. Arrange for a married couple to discuss types of family recreation programs participated in by their family and with other families.
4. Have panel discussions, round table discussions, or committee reports on topics such as:

Love and affection.

Dating.

Courtship.

Desirable qualities in a mate.

How to attract and hold interest in the opposite sex.

Marriage.

Rearing a family—child care, baby sitting.

The conduct during junior-senior affairs (parties, beach trips, breakfasts, etc.) which take place late at night following the junior-senior prom.

Proper boy-girl relationships during off campus school events (trips to Washington, conventions, etc.).

“Parking”.

Divorce.

The place of the church in family life.

The place of sex in marriage.

Mother who works outside the home.

5. Seeking reliable help with personal problems from:

Teacher.	Physician.
Nurse.	Psychologist and psychiatrist.
Guidance counselor.	Social case worker.
Minister.	

6. Develop a bulletin (as a committee or as a class project) giving recreational activities for the family group.

7. Develop a list of recreational activities in which groups of families may participate. Example—a community picnic.

Evaluation.

1. Do pupils have knowledge and understanding of the human reproductive system?
2. Does the pupil show evidences that he has an appreciation for his family, the family in general, for the church, school and other community resources?
3. Does the pupil seem to have an understanding of what is involved in the responsibilities of marriage and parenthood?

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COMMUNICABLE DISEASES AND SANITATION

Teaching pupils how to protect themselves and others from communicable diseases and about the importance of sanitation in disease control is an important responsibility of teachers. Failure to teach some of the facts included in the geography book or failure to teach some historical fact may never make any significant difference in the life of a child, but failure to teach a child the essential facts about how to avoid some of the communicable diseases might actually make a difference in his span of life.

However, the material in this unit is intended to cover only those facts about communicable disease and sanitation that may be considered necessary *to influence practices and attitudes*. Every pupil, before he graduates and as early as he can comprehend the facts, should be taught how to protect himself and how to help protect others from the diseases that can be controlled in part or altogether by intelligent individual action or in cooperative community action.

Every child should learn as early as possible in his school career, at least before he leaves school:

How to protect himself against communicable disease.

How he can help protect others with whom he comes in contact from communicable diseases.

How he can and should cooperate in the community's efforts to control communicable diseases through sanitation and other control measures.

The section "Healthful School Living" deals with the environment aspects of the health program and is thus closely related to the materials in this resource unit.

There are two parts to this unit. The first part deals with communicable disease control and the second with sanitation. Since sanitation is one of the principal ways of controlling communicable diseases, the two topics are included in the same section; but they are discussed separately because both are important enough to deserve special emphasis.

A specific teaching example is included for each of the four levels—grades 1-3, 4-6, 7-9 and 10-12—to serve as guides for developing other topics. These examples attempt to name a topic, set up the objectives, show how the project was developed, and evaluate the outcomes.

COMMUNICABLE DISEASE CONTROL

INTRODUCTION

An effective communicable disease program requires not only a healthy environment but also intelligent self direction on the part of children, youth and adults. It is the school's responsibility to provide pupils with opportunities to develop understandings, attitudes and habits that will enable them to apply intelligently up-to-date knowledge related to the causes of disease, the ways diseases are transmitted from one person to another, and the means of controlling or preventing them.

SOME SPECIFIC FACTS

All communicable diseases are produced by some kind of living organism, such as viruses, bacteria, and protozoa. The spread of diseases is dependent upon the transfer of these living organisms from one person to another, either directly or indirectly.

Most communicable disease producing organisms are transmitted by spray or droplets expelled by coughing, or sneezing or by normal conversation and are breathed in by others. Direct contact between one individual and another may also serve as a mode of transmitting disease.

Other diseases are spread by contaminated water, milk, and other foods, while some are transmitted by flies, fleas, lice, mosquitoes, ticks and other animal vectors.

The job of controlling and preventing communicable diseases is to prevent the transmission of the organism—to keep the well person from getting the germ from the sick person—or in certain diseases to fortify the well person so that he will not “catch” the disease. For example, immunization of children early in life against diphtheria protects them against the disease.

The four principal methods of controlling communicable diseases are (1) Sanitation, (2) Isolation and quarantine, (3) Immunization, and (4) Education.

BASIC FOUNDATIONS

1. Sanitation.

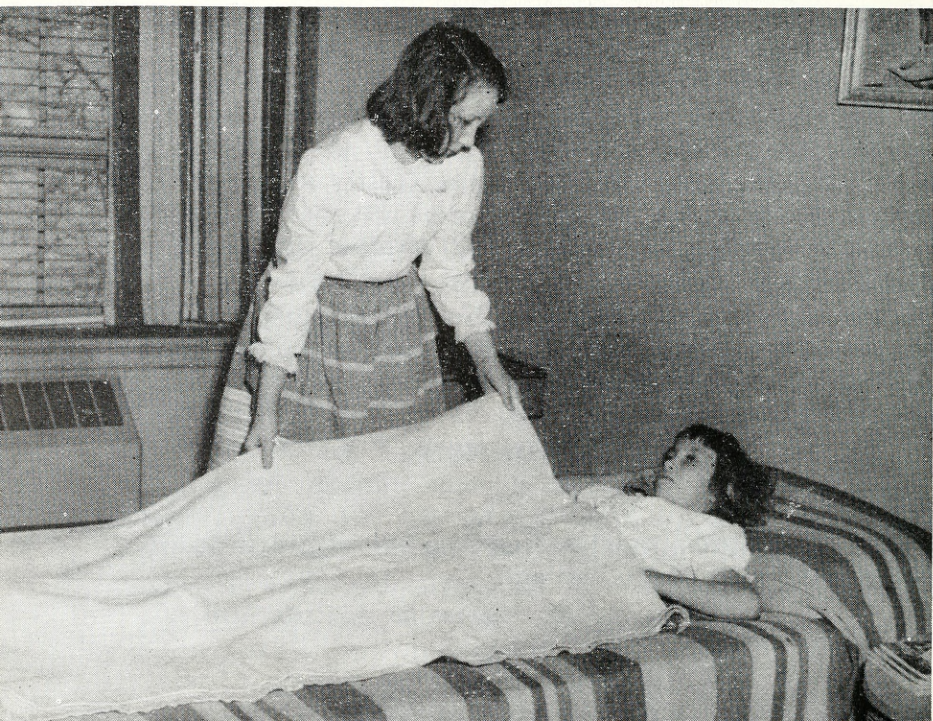
Basic information and teaching suggestions are included In the second part of this section.

2. Isolation and Quarantine.

Children suspected of having a contagious disease should be isolated immediately. The parents should be notified and advised to take the child to the family physician. Whenever the illness is diagnosed as a contagious disease, the health department should be notified by family physician, family, or teacher. It is in the early stages that many of these diseases are highly communicable. The early symptoms are much alike, and the first step toward control is recognition and reporting. It is necessary only for the teacher to recognize that the child has some of the signs and symptoms of a disease which he should report in accordance with the policies adopted by the school. The sick child should be isolated from the rest of the group in a separate room whenever possible. If no room is available and the child cannot be taken home, the teacher should place him in a corner of the room as far away from the other children as possible.

Whether the child should be quarantined and for how long, depends upon the disease. The local county health department is responsible for making and enforcing quarantine regulations.

Children suspected of having a contagious disease should be isolated immediately



If a disease has progressed to the point that it is recognized clinically, a proportion of the spread has occurred. Therefore, observation by the teacher throughout the day aids immeasurably in control.

Since nearly all of the more common communicable diseases seen in the school appear similar at the onset, the following list of symptoms will be of value to the classroom teachers. *(These symptoms are not listed for the teacher to use in establishing a diagnosis, but for early recognition of conditions for which the child should be referred to nurse or physician and/or excluded from school.)*

Coughing or sneezing.	Flushed face.
Sniffles or running nose.	Sore throat.
Fever or chills.	Swollen glands.
Red or watering eyes.	Pain: abdominal, chest, back.
Nausea or vomiting.	Frequent or severe headaches
Rash.	Diarrhea.
Pallor.	General malaise.

Diseases of the skin and scalp most often seen among school children are impetigo, scabies (itch), pediculosis, ringworm of the scalp, and "ground itch" (the most common first symptoms of hookworm).

Any deviation from normal conditions or behavior characterized by itching, little blisters, pustules, sores, scabs, etc., are indications that the child may have one of the above diseases. Any child with any of these conditions should be encouraged to go to his family physician or be referred to the nurse just the same as for other diseases.

3. Immunization.

Immunization procedures rank high on the list of control measures. An effective immunization program among infants and pre-school children will eliminate, or reduce to a minimum, those diseases for which a satisfactory immunization has been developed. Every child entering school should be protected against diphtheria, whooping cough, smallpox, and possibly tetanus, by having these immunizations early in life and by a booster dose just before entering school.

Laws in North Carolina provide that the teacher and principal may not allow a child to attend school until he has been immunized against smallpox, whooping cough and diphtheria.

Also, parents are required to have children immunized against diphtheria and whooping cough before they become one year old.

4. Education.

“As important as any other control measure is the education of children and parents concerning personal health practices that help prevent the spread of diseases. Children should be instructed to:

Avoid people who are coughing or who show signs of being sick.

Wash their hands before eating and after going to the toilet.

Keep their hands and fingers out of and away from mouth and nose.

Use only sanitary drinking fountain, a paper cup, or their own cup or glass.

Cover all coughs and sneezes, preferably with disposable tissue or a handkerchief.

Use only one's own hat or cap, brush, comb, towel, and gymnasium clothing.

Get enough rest and sleep.*

Note: See section on “Personal Cleanliness and Grooming” for additional information.

SOME SPECIFIC DISEASES

1. Tuberculosis.

Since tuberculosis is a definite problem among teen-agers, it is being treated separately. Despite the fact that great progress has been made in tuberculosis control, it is still one of the leading causes of death among teen-agers and young adults.

The school, like the home, provides continuing and repeated contacts favorable to the spread of the disease. The teacher, or a classmate, could be the source of infection.

The school is in a position to help this age group through instruction of individuals regarding prevention and control;

*Health Education, 1948, pp 66, American Medical Association and National Education Association, 1201 Sixteenth Street, N. W., Washington 6, D. C.

and through an understanding of health services, especially the chest X-ray, in connection with the disease, to advise when these services should be used and where they may be secured.

2. Venereal Diseases.

The 1948 edition of *Health Education*¹ states that venereal diseases are rarely problems in the elementary school. However, in the secondary school the problem is somewhat different since a fair proportion of new cases of syphilis and gonorrhea occur in young people under 20, a number of whom are in high school.

If the school is to discharge its duty, it should provide opportunities for all high school students to:

- a. Secure information concerning the spread and control of venereal diseases. For example:

The majority of venereal disease cases are spread by sexual relations.

Syphilis, a venereal disease, can be spread by kissing, drinking after an infected person, and use of an infected towel, but these are the "exception rather than the rule."

Venereal diseases can be cured when treated in the early stages.

Pre-marital blood tests (required by law in North Carolina to secure a marriage license) and blood tests of all mothers during early pregnancy (required by law) are ways of discovering cases of syphilis which may be treated so as to protect other individuals.

- b. Secure understandings of the fundamental facts of life and human relationships.

Prevention and control of syphilis and gonorrhea is first of all a responsibility of the individual. (See Section on "Family Life Education.")

3. The Common Cold.

The common cold causes approximately one-fourth of all school absences. It is, therefore, the responsibility of teachers to teach children that colds are caused by virus germs, but

¹Health Education, American Medical Association and National Education Association, 1201 Sixteenth Street, N. W., Washington 6, D. C.

that fatigue, exposure and malnutrition are thought to be factors that lower resistance to colds. They should stress that regular sleep, rest and outdoor exercises, especially in the sunshine, an adequate diet, including plenty of milk, fresh fruits and vegetables, and water may help one to resist colds.

Boys and girls need to understand the importance of such practices as these:

To cough and sneeze into a handkerchief.

To sleep alone, if possible.

To wash the hands before handling anything of anyone else, when one has a cold.

To wash dishes that have been used by an infected person thoroughly with hot water and soap before any other person uses them, and to keep food that they have handled away from others.

To remain at home when sick with a cold.

HOME PROTECTION

1. In order for each home to provide the best protection, there should be:

Adequate provision for heating, ventilation, sewage, and garbage disposal.

A safe and adequate source of drinking water.

(Avoid use of common "dipper." No one in the family should have to use a cup or glass after it has been used by another, until it has been washed thoroughly in hot water and soap.)

Provision for individual use of towel, toothbrush, bath-cloth, silverware, etc.

Provision for isolation of one who is ill with a communicable disease.

2. Important points to be considered in connection with food are absolute cleanliness, protection from flies, insects, rats, mice, proper storage in refrigerators to prevent spoiling, and avoidance of the use of food which has spoiled.
3. Parents should fulfill their responsibilities for protecting their children in the following ways:

Being sure that the child has been immunized recently enough to be immune from the diseases for which immunizations are recommended.

Using a home check sheet for signs and symptoms of diseases.

Keeping the child home if he appears sick, even though the parent thinks "it is only a bad cold."

Seeing that the child gets plenty of sleep and rest, a sufficient quantity of the right kinds of foods, and enough recreation and exercise.

COMMUNITY RESPONSIBILITIES

One of the most important responsibilities of a home and community, including the school, is to stamp out the carriers of diseases, such as mosquitoes and rats. The big three preventive measures in malaria control are to screen houses, to destroy mosquito wigglers in their breeding places, and to see that malaria sufferers get medical care. Whenever these things are done, malaria begins to disappear. When the chain of human-to-mosquito-to-human is broken, malaria is wiped out.

The rat carries some of man's worst diseases, such as bubonic plague, typhus fever, cholera, anthrax and infectious jaundice.

Regular and proper disposal of garbage and sewage and maintenance of a pure and safe water supply comprise the greatest responsibilities of each individual and community in the control of communicable diseases.

Suggestions Regarding Communicable Disease Control

1. Children should be observed regularly by the teacher for symptoms of communicable diseases.
2. Any child with signs of a communicable disease (including a bad cold), such as rash, running eyes, fever, nausea, and vomiting should be kept from school. If the child goes to school and is suspected of having a contagious disease, he should be isolated or sent home as soon as possible and reported to proper authorities. Until the child can be sent home, he should be isolated in a separate room; or if this is not possible, he should be placed in a corner of the room away from the other children.

3. The principal or teacher has the responsibility to see that no child enters school who has not had the required immunizations against whooping cough, smallpox and diphtheria. (See summary of laws in Appendix.)
4. A child who has had a communicable disease should be certified by the proper person before returning to school. In most cases, especially in rural areas, the teacher must decide whether to readmit the child to school.
5. Modify program for children returning to school after illness. Don't have them make up all lost work the day they return.
6. Children should be checked at school entrance to make sure pre-school vaccination and immunizations are complete. (See Legal Requirements in Appendix.)
7. The teacher should not attempt to diagnose, but should see and report symptoms in accordance with procedures agreed upon by school and health officials.
8. For their own sake and others, teachers should not come to school when they have signs of communicable diseases, including colds.
9. School authorities should keep informed about rules and regulations of the health department concerning communicable disease control.
10. All school personnel should know school health policies concerning control of skin infection, such as ringworm, scabies, and pediculosis.
11. Schools should inform parents and prospective parents that children should be immunized early in life and given booster shots on entering school.
12. Teachers and parents should know that many of the communicable diseases are not subject to quarantine, but pupils and the public should be educated as to the control and care of such cases.
13. Parents should know that it is important to be very careful in protecting babies and young children from exposure to infection. They should be kept away from people, especially crowds, and poorly ventilated public places, especially during epidemics. Taking the baby to visit sick people is very dangerous.

14. Policies and procedures should be established and followed to assure the following:

Proper heating and ventilation.

Safe water supply and approved drinking fountains.

Adequate sewage and garbage disposal.

A safe milk supply which is an important aid in the control of such diseases as typhoid, dysentery, scarlet fever, and septic sore throat.

Safe food handling facilities and personnel in the school cafeteria.

Good personal cleanliness habits. (See Section on Personal Cleanliness and Grooming.)

SUGGESTED CLASSROOM STUDY

GRADES 1-3

1. Topics.

- a. Observing quarantine regulations.
- b. Use and care of clothing.
- c. Good personal health habits.
 - Handwashing.
 - Use of handkerchief or tissue.
 - Food handling.
 - Dental care.
 - Care of eyes, mouth, nose.
- d. Physical examination.

2. Suggested Activities.

- a. Discuss with the children the reasons for immunizations required for school entrance, diseases which may be prevented, and vaccination scars.
- b. Discuss general health in relation to physical examinations, cleanliness, how diseases spread from one person to another by germs from a sick person, how these germs enter a well person's body by way of the nose and mouth, through the skin by cuts and bites, or from contaminated food.
- c. Discuss reasons for washing hands before eating and after using the toilet.
- d. Discuss proper clothing and why wet clothing should be changed immediately. Stress danger of colds and how early they are "caught."

- e. Discuss importance of staying home when sick and away from anyone else who is sick.
- f. Observe and discuss proper use of tissue or handkerchief when coughing and sneezing.
- g. Observe and discuss danger of putting fingers and other objects into mouth.
- h. Discuss cleanliness of room, school cafeteria and playground.
- i. Form a classroom health committee to help keep the classroom clean, to see that hands are washed properly, handkerchiefs are used, and objects are not put into the mouth.
- j. Use films, slides, posters, and drawings to illustrate points in disease prevention. Have pupils make posters showing how they can help.
- k. Keep a chart on all pupils to see who has no "catching illness" during the year.
- l. Discuss how fresh air and sunlight kill germs. Observe classroom for amount of fresh air and sunlight. One pupil may be elected by the class members to be responsible for reading the thermometer to see if the proper temperature is maintained. Record temperature on chart.
- m. Demonstrate handwashing using soap, warm water, towel.
- n. Demonstrate the brushing of teeth. (See Section on "Dental Health.")
- o. Demonstrate and discuss the use of drinking fountain.

Note: The above activities should be introduced and taught at the 1-3 grade level. If at any time it is found they have not been successfully used or taught, they should be repeated or introduced.

3. Teaching Example: Health Habits for Communicable Disease Control.

The morning inspection by the teacher was the means of starting an informal discussion among the group on why an inspection was needed. The pupils helped in the prevention and control of disease by staying away from others who were sick, wearing clothing suitable for the weather, and many other phases of prevention which arose as each child became aware of the requisites for healthful living and a healthful environment.

Children of this age group presented varying levels of development, depending upon their individual abilities, the conditions of their pre-school and their school life. Some acquired good health habits and became aware of simple ways to help ward off communicable diseases.

Objectives.

To help children form good health habits.

To help children become aware of ways to prevent communicable diseases and to guide them in an approach to healthful living.



Wash hands before eating

Through informal discussion, the class set up the following rules for good health:

Wash hands before eating.

Refrain from putting objects in mouth.

Sleep at least eight or nine hours a day.

Eat three well-balanced meals every day.

Form good habits of elimination.

Take a bath every day.

Brush teeth after eating.

Wear comfortable clothing.

See that schoolroom temperature is neither too warm nor too cold; see that lighting is adjusted to get best use of the light and to be most comfortable.

Refrain from rubbing the eyes or from putting fingers in the ears or nose.

After the general rules of health were set up, the group discussed communicable diseases, including common colds. In order to help them become aware of the danger of communicable diseases, the teacher guided the children in a discussion or demonstration of the following:

Colds and their effect on the body.

The use of the handkerchief or cleansing tissues.

Proper way to dispose of cleansing tissues.

Safeguards for coughing or sneezing.

The signs of a cold.

Classroom Activities.

Some class activities designed to teach general health habits, together with specific methods of preventing communicable diseases, were:

Conversation about cleanliness, good diet, physical growth and rest habits.

Each week a pupil "doctor and nurse" were elected by the group. Their specific duties were to inspect other members of the group and to see that health charts were properly checked.

Rhymes and jingles on how to keep from getting sick were composed by groups. Paragraphs on communicable diseases were written by a committee appointed for the purpose.

Posters were made on such subjects as proper food, proper bedside care for a sick child, how to use a handkerchief, and how to brush the teeth.

Discussions were held on such subjects as proper clothing for all kinds of weather; removal of heavy wraps and galoshes when in the house and removal of wet clothing on rainy days; the right temperature for the classroom; the proper amount of rest between school activities; what a good school lunch should contain; and sanitary conditions in the rest rooms.

Films were shown including such subjects as "The Confessions of a Cold," "How to Keep From Getting Sick," "Exercise is Good for Your Health," and "Fresh Fruits and Vegetables Help Keep You Well."

Assembly programs grew out of the activities carried on by the class and were centered around general health topics and the prevention of colds and other communicable diseases.

4. Evaluation.

Did the children improve in the observance of the general rules of sanitation and cleanliness?

Did they help to keep the building and grounds clean?

Did they improve habits of eating?

Did their habits of orderliness improve?

Did they make better adjustments to school routine?

Were the children's habits of rest and relaxation improved?

To what extent did the children show signs of being aware of the dangers of communicable diseases and the proper methods of combating them?

Did they enjoy working and playing together?

Did they develop general habits of safety and health?

To what extent were they courteous and thoughtful to others?

Did they enjoy the experiences of being a member of the school group?

GRADES 4-6

1. Topics.

- a. Water supply and sewage disposal.
- b. Breeding of flies and mosquitoes.
- c. Clinics for prevention, detection, and correction of diseases.
- d. Regular meals, sunlight, and rest as safeguards against disease.
- e. Identification and study of more common diseases, especially colds.
- f. Scientists and their contributions.

2. Suggested Activities.

- a. View and discuss films and other visual aids about health discoveries.
- b. Observe the services of clinics.
- c. Survey community diseases.

- d. View bacteria on prepared slides under microscope.
- e. Dramatize stories of the lives and services of scientists.
- f. Provide experiences in home pasteurization.
- g. Set a daily routine for developing and maintaining strong bodily resistance to disease.
- h. Use local health official as consultant on the incidence of a number of new cases of certain communicable diseases in the community.
- i. Have pupils arrange bulletin boards with suitable pictures and posters.
- j. Develop creative drawings and posters.
- k. Develop student picture show.
- l. Compose original poems and stories.

3. Teaching Example: Contributions of Scientists in the Field of Communicable Disease Control.

The visit of the X-ray machine to the school stimulated many questions from pupils as to why it was necessary to spend so much time and money for this simple operation. These simple questions developed into a lengthy discussion of the various contributions made by man in an attempt to overcome disease. Their thinking was then directed to questions concerning scientists in their work toward controlling communicable disease. This discussion served as a basis for setting up specific objectives. The objectives were organized into problem areas from which the pupils chose the areas in which they wanted to work.

Each group set up its own objectives and outlined the subject matter to be covered. This subject matter was then identified in terms of materials to be used and objectives to be developed. After working together in groups, finding information, developing problems and making reports, each group's work was culminated in a different kind of report, such as bulletin board display, notebook, drama, or table project.

Problem Areas.

Contributions of the X-ray including the study of tuberculosis.

Pasteurization and its contributions.

Anesthetics, vaccinations and inoculations.

Past and present contributions to the field of communicable disease control.

Specific Objectives.

To gain a knowledge of the contributions of some of the scientists in the field of communicable disease control.

To develop the ability to understand and utilize these contributions in promoting the health of individuals and groups.

To acquire knowledge about conditions and possibilities for improvement in the community.

To learn about the more common communicable diseases.

To get a clearer understanding of precautions, preventions, and cure of communicable diseases.

To acquire a greater appreciation for the efforts of man to rid mankind of the plagues of disease.

To secure better cooperation in immunization programs.

Suggested Activities.

Activities that led the pupils into a recognition and solution of problems:

Viewed and discussed films and other visual aids about health discoveries. Determined possibilities of application of new ideas to everyday life.

Visited health, X-ray, typhoid and diphtheria clinics for gaining information.

Surveyed diseases which actually appeared in the community and discussed methods by which these diseases may have been prevented.

Read and discussed stories about health discoveries and progress in scientific thinking concerning prevention and control of disease.

Dramatized stories of the life and work of scientists in health.

Made notebooks illustrating points learned.

Developed table project showing models of contributions of scientists.

Observed the use of antiseptics and disinfectants to prevent and control disease, and discussed why and how often such measures are necessary.

Devised a daily routine for developing and maintaining strong body resistance to disease (including adequate rest, sleep, exercise, and food).

Used the local nurses and doctors as consultants in the study of the diseases in the community.

Evaluation.

Pupils' use of some precautions regarding places from which they get drinking water and food.

Some made an effort to get drinking water tested.

Greater participation was taken in projects the community developed to insure pasteurization of milk, pure water supply, and immunization against diseases.

Better observance of quarantine and isolation periods in cases of communicable disease is noted.

Learned the importance of X-ray in discovery and treatment of disease.

Learned the importance and use of anesthetics.

There was evidence of sympathetic understanding and appreciation for work of contributors to science.

GRADES 7-9

1. Topics.

- a. Centers for protection, prevention, detection, and correction of disease.
- b. Hygienic control of food production and distribution.
- c. Care of persons in home with communicable disease.
- d. Laws and regulations—State, local and federal.
- e. Personal care in relation to sanitation.
- f. General maintenance and cleanliness of all school facilities.
- g. Hygienic control of insect borne and intestinal diseases by the practice of sanitation. (See Sanitation Section.)
- h. School sanitation standards.

2. Suggested Activities.

- a. Draw pictures from photographs through microscope.
- b. Experiment with bacteria by developing culture. Note effects of heat, cold, light, darkness and moisture. (High school science teacher can help in this activity.)

- c. Use microscope to view specimen of blood cells.
- d. Destroy breeding places of flies and mosquitoes.
- e. Conduct experiments with guinea pigs to determine value of vitamin C and for other tests.
- f. Conduct demonstrations in use of antiseptics, dressings, and first aid measures.
- g. Study local and State laws for communicable disease control.
- h. Conduct class survey in regard to colds over period of time.
- i. Make study of class and school absences caused by illness from communicable diseases. Formulate practical ways to try to reduce the incidence of these diseases.
- j. Make charts and graphs on school, county and State communicable disease statistics.
- k. Observe procedure in clinics.
- l. Make exhibits and posters for school bulletin boards.
- m. Make committee reports, or use panel and open forum in presenting information to the class on communicable and non-communicable diseases.

3. Teaching Example: Prevention and Control of Communicable Disease.

Pupils of the 9th grade were somewhat familiar with the various measures in the prevention and control of communicable disease, but it was found that further study was necessary. This knowledge served as a spring board for more concentrated and detailed work. The class set up its objectives and made plans to give some concentrated study by dividing into groups according to phase of work chosen to develop.

Objectives.

These general objectives were set by the entire class:

To give the pupil such information about communicable diseases as will interest and aid him in protecting and improving his own health and that of others.

To provide for every pupil such experiences as will develop an appreciation of health.

To seek to influence children to become interested in the improvement of their own health environment, habits, and attitudes.

To give better understanding of principles and scientific data involved.

Special emphasis was placed on these communicable diseases: scarlet fever, smallpox, whooping cough, poliomyelitis, and measles.

Problem Areas.

Four major groups were formed according to the four major divisions of the study as follows:

a. CATCHING DISEASES (symptoms and causes).

Three kinds of germs studied.

Source of disease germs.

How germs enter and leave the body.

Incubation periods (the time between exposure to the disease and when the person comes down with the disease).

Diseases caused by animals.

Activity and Experiments. Pictures were drawn from photographs taken through a microscope of four disease causing bacteria—pneumonia, diphtheria, lockjaw, tuberculosis.

Experiment: Bacteria Garden

What was used: Flat dishes, covers, gelatin, water and alcohol lamp.

What was done: The food was made by heating gelatin in water. The mixture was poured into flat dishes, each provided with a cover. (The dishes were cleaned with boiling water.) When the food cooled, it became a stiff jelly. The cover of the dish was removed and the culture food (gelatin) was exposed to some source of bacteria.

What was observed: In a few days each bacterium which fell upon the culture formed a colony which appeared as a white, gray or brown spot.

What was learned: Bacteria are found almost everywhere. They reproduce by cell division very rapidly. By constant division, one bacterium may reproduce one million bacteria at the end of a ten hour period. The film, "Defense Against Disease," was shown.

b. MEANS OF PREVENTION.

Sanitation.

Immunization as recommended, or required by law.

Isolation and quarantine of cases and suspected cases.

Education.

Activity and Experiments. Blood specimen was viewed through the microscope. The blood cells or corpuscles were visible (not too much so). With the aid of a photograph taken through a microscope the children learned that red corpuscles are flattened disks while the white corpuscles are larger and irregular in shape.

c. MEANS OF SPREAD.

(1) Direct contact with

(a) Patient.

(b) Carrier.

A detailed study was made of some insect-carriers, especially the housefly.

(2) Indirect contact.

(a) Droplets spread by coughing, etc.

(b) Contaminated articles.

(c) Contaminated food and water.

A short study of how milk and food supplies can be kept safe was made.

Activities and Experiments. One boy, who was particularly interested in dairies, gave a detailed report on "How Clean Milk is Produced." Another boy, who works in a dairy after school hours, gave a report on "Why and How Milk is Pasteurized."

The children destroyed many breeding places of flies and mosquitoes in their locality. The four stages of the life of the housefly were illustrated by one member of the class.

d. CONTROL OF CASES.

(1) Health Officers.

(a) Work of the county health department.

(b) Work of N. C. Health Department.

(c) Work of national government.

Activities and Experiments. A committee was appointed by the class to interview members of the county health department to secure information. In turn, they reported this information to the class.

Evaluation.

1. Did pupils learn that diseases are caused by plants and animals which live in the body?
2. Do pupils understand how the body protects itself against disease?
3. Do pupils know how germs can be killed before entering the body?
4. Do pupils understand ways of preventing spread of germs and ways the body has of protecting itself?
5. Do pupils understand how science has found ways of bringing about immunity against diseases?

GRADES 10-12

1. Topics.

- a. Water supply and sewage disposal in relation to the spread of diseases.
- b. How to prevent breeding of flies and mosquitoes.
- c. Hygienic control of food production and distribution (handling).
- d. Identification and study of more common diseases.
- e. Laws and regulations—State, local and federal.

2. Suggested Activities.

- a. Visit laboratory of hospital (see equipment, building, etc).
- b. Demonstration of use of special equipment, stethoscope, and X-ray.
- c. Take blood test and blood pressure, etc. (Visit local health department.)
- d. Show films and slides on communicable and non-communicable diseases.
- e. Get tuberculin and X-ray tests for pupils.
- f. Get typhoid shots for those who have not been vaccinated.
- g. Assist with hearing testing, speech, vision testing—discussion of topic in class.

- h. Observe sanitary inspection of school and cafeteria.
- i. Assist with pre-school clinics, X-ray survey, etc.
- j. Prepare radio scripts, news articles on communicable diseases.
- k. Study the latest information concerning vaccination against the common cold.
- l. Use slides, culture media, etc., in laboratory—use microscope.
- m. Observe methods of sterilizing equipment. Study use of antiseptics and their value in killing communicable disease bacteria.

3. Teaching Example: Tuberculosis Development and Control.

The principal and the school health committee with the cooperation of the local tuberculosis association scheduled a date for the mobile X-ray unit to visit the school. With the announcement of the visit, the biology class began asking their teacher numerous questions about an X-ray machine, and the detection of tuberculosis. After much discussion, the teacher and class decided to learn more about tuberculosis and the use of the X-ray machine in finding tuberculosis cases before the arrival of the X-ray unit to the school.

The class decided that their study of tuberculosis as an example of a communicable disease should include (a) nature and history of the disease (b) methods of detection (c) treatment (d) prevention (e) individual and community responsibility.

Objectives.

- a. To learn about the tuberculosis disease organisms.
- b. To learn how the human body defends itself against tuberculosis germs.
- c. To recognize the common signs and symptoms of tuberculosis.
- d. To learn about the prevention, spread and treatment of tuberculosis.
- e. To learn and utilize methods of detecting tuberculosis.
- f. To accept a personal responsibility for helping to prevent and control tuberculosis by imparting to others in the home, school and community the knowledge gained.

Classroom Activities.

1. Along with the class discussions, reports, forums, questionnaires, etc., on tuberculosis, all class members were given the tuberculin test. The county public health nurse visited the class and explained the amount of tuberculin each would receive and how it was obtained. The patch test was given and the nurse explained that if a student had a positive reaction to the tuberculin test and patch test, it would be evident within 48 hours; that positive reaction probably would indicate the presence of tuberculosis germs within the body, or an old scar due to the presence of germs during childhood. Both the positive reactors and the non-reactors were given chest X-rays. (An X-ray is the best way to learn whether or not one has tuberculosis.)
2. A visit was made to the county tuberculosis sanatorium.
 - a. The physician interpreted a chest X-ray picture to the students.
 - b. Students observed the physician and nurse as they gave a tuberculosis patient pneumothorax.
3. The class assisted the technician with the X-ray survey in the school.
 - a. A member of the tuberculosis association or health department explained to the class how to fill in the records on each member during the clinic.
 - b. Different members assisted with the X-ray survey at certain hours each day.

Evaluation.

- a. To what extent did the pupils gain an understanding of the essential facts about T. B. control?
- b. Did the pupils show good attitudes about taking the tuberculin and patch tests?
- c. How many of the pupils of their own accord got chest X-rays?
- d. Did the members of any families of the pupils have chest X-rays made?
- e. What were the attitudes of the members of the class about the Christmas Seal sale?

SANITATION

INTRODUCTION

Sanitation in its broad sense covers any and all aspects of the physical environment which have to do with the protection of the public health. The teaching of sanitation on the level of the understanding of the students and in relation to the needs of the home, school and community will assist in:

Raising the standards of living.

Controlling communicable diseases in the school and the community.

Protecting the individual from catching a communicable disease.

Developing good attitudes towards the support of sanitary improvements in the school and community.

The section on "Healthful School Living" deals with the school environment primarily from the standpoint of the administrator, but it will also be found useful to the teacher in teaching both sanitation and communicable disease control. However important it is to teach about sanitation, teachers, administrators, and taxpayers should always remember that a good sanitary school environment is the best and most effective visual aid for instruction in sanitation. Using sanitary facilities helps to build health habits. Sanitary living plus understandings developed in the classroom can and will make life happier and healthier in the home and community.

The section on "Community Health" contains many suggestions about community resources and their use that may be found helpful in the teaching of sanitation.

GRADES 1-3

1. Suggested Topics for Study.

- a. Keeping clean. (See Section on "Cleanliness.")
- b. Classroom and playground cleanliness and care.
- c. Eating and drinking habits. (See Section on "Nutrition.")
- d. Lunchroom use and cleanliness.
- e. Care of other parts of the building, such as toilet rooms, halls and auditorium.
- f. Use and care of the drinking fountain.

2. Suggested Activities.

- a. Discuss reasons for washing hands before eating and after using the toilet.
- b. Discuss personal care in relation to sanitation.
- c. Display posters to illustrate phases of sanitation.
- d. Arrange bulletin board to tell a story.
- e. Demonstrate (by teacher) how dirty hands soil books and other articles.
- f. Demonstrate (by children) how to wash hands.
- g. Make drawings of their own interpretations of sanitary practices.
- h. Help keep floors and desks clean.
- i. Wash hands daily before lunch and after going to the toilet.
- j. Let children choose class members to serve as "doctor" and "nurse" for making inspections of hands and faces of children.
- k. Select or elect a committee to check cleanliness of room.
- l. Use slides, films and drawings to illustrate sanitary practices.
- m. Use toilet facilities in a sanitary way.
- n. Use drinking fountains in a sanitary and safe manner.

3. Teaching Example: Handwashing.

In a small rural school that has no plumbing, handwashing is an immediate problem. One small school solved the problem this way:

The pupils and teacher discussed: (1) the importance of handwashing, (2) the need for an appraisal of the facilities that were already available, and (3) plans to provide better facilities.

The following plan was used:

- a. A container large enough to hold from 4 to 5 gallons of water was secured. (This container could have been a wooden keg, or a heavy galvanized can. The can must be heavy enough, if metal, to permit a water faucet to be welded into the lower half near the bottom.)



Improved handwashing facility

- b. A second container was secured to place under the can to catch water as it ran out of the faucet over the child's hands.

Note: The group made sure that the water did not waste on the floor. This was assured by placing a box under the pan to raise it close to the faucet, as illustrated.

This activity gave the students an opportunity to apply something that they had been studying, therefore learning in the most desirable way and at the same time having experiences in other areas of the curriculum, such as purchasing, planning cooperatively for a common interest, thinking creatively (art—decorating the handwashing area), and working together.

- c. *Evaluation.* There was evidence of carry-over in this activity. The children came to school cleaner, began to wash hands when needed without being asked or reminded to do so, learned to make liquid soap from scrap soap, and some were stimulated to set up similar facilities in their homes.

- d. Some tips for using this facility:

Don't have it too high for the smaller children (the water may run down their sleeves if they have to reach up to wash hands).

Keep the water warm by placing a small container on the stove. As fast as water becomes hot, pour into handwashing facility.

Teach pupils to wash hands quietly when needed.

Let them decide who, how often, and when the can that catches the dirty water should be emptied and the container filled with warm water.

Use an old piece of linoleum to place on the floor under the facility.

GRADES 4-6

1. Suggested Topics for Study.

- a. Personal care in relation to sanitation.
- b. Classroom and playground cleanliness and care.
- c. Eating and drinking habits.
- d. Lunchroom use and cleanliness.
- e. Heating and ventilation.
- f. Lighting.
- g. Garbage and refuse disposal.
- h. Insect and rodent control.

2. Suggested Activities.

- a. Survey school facilities for heating and ventilating, cleanliness, garbage and refuse disposal, toilets, and drinking fountains.
- b. Demonstrate proper sanitary practices.
- c. Encourage creative drawings, posters, poems and stories.
- d. Have pupils arrange bulletin boards.
- e. Use local health officials as consultants on school sanitary needs.
- f. Experiment with humidity.
- g. Check room with light meter.
- h. Study and plan classroom arrangement. Make diagrams of proper use of space in classroom for work, study, and recreational purposes.
- i. Arrange field trips to a meat market or restaurant to observe health hazards and good health practices.
- j. Study responsibilities of custodian and ways the student and teacher can help him maintain the standards of sanitation for the school.

- k. Observe or carry on various activities in the lunchroom, such as:
 - Working out a service line.
 - Proper way to wash dishes.
 - Proper garbage disposal.
 - Sanitary handling of dishes.
- l. Model sanitary facilities from clay, wood, sand, or other media.
- m. Inspect school for signs of insects and rodents.
- n. Look at pencils, money and finger nails under magnifying glass to show dirt particles and the possible presence of bacteria.

GRADES 7-9

1. Suggested Topics for Study.

- a. Diseases spread by an insanitary environment.
- b. Sanitary control of:
 - Insect borne diseases.
 - Intestinal diseases.
 - Respiratory diseases.
- c. Sanitation of:
 - Meat markets and abattoirs.
 - Food establishments and dairies.
 - Public buildings and institutions.
 - Housing.
 - Private and public recreation centers.
- d. The enforcement of sanitary regulations.
- e. Public water supply, sewage and garbage disposal and other community sanitary facilities.
- f. Sanitation laws—Federal, State, local.
- g. School sanitation—building and grounds.
- h. Maintenance, use and care of sanitary facilities at school.

2. Suggested Activities.

- a. Select and study diseases caused by insanitary environment and ways to prevent them.
- b. Make field trips to study hygienic control of insect borne, intestinal, and respiratory diseases in meat markets and

- abattoirs, food establishments and dairies, public buildings and institutions, housing and private and public recreation centers.
- c. Become acquainted with agencies in the community that are responsible for enforcement of sanitary regulations and those that are in an advisory capacity.
 - d. Survey community sanitary facilities and needs.
 - e. Use photographs to show comparison of community facilities and environment.
 - f. Study Federal, State and local sanitary laws.
 - g. Make a model sanitary land fill for refuse disposal or a model of a protected well.
 - h. Construct a model housing unit.
 - i. Study plan of city and rural garbage disposal.
 - j. Observe sanitary inspection of school and cafeteria by the health official.
 - k. Develop radio script and news articles for papers.
 - l. Make use of class and panel discussion, forum and debate.
 - m. Arrange for the class to discuss: "The menace of cigarette stubs, used matches, ashes, etc., on the floor of a public building after the meeting." Some members may have a specific situation to describe.
 - n. "The smoke was so thick in the room where we met that we could hardly see or breathe." What should be done about such situations?

GRADES 10-12

1. Suggested Topics for Study.

- a. Heating and ventilation.
- b. Lighting.
- c. Lunchroom sanitation—service, use, and maintenance.
- d. School sanitation standards.
- e. Centers for prevention, detection and correction of disease.
- f. Cafeteria uniforms and classes developed through home economics department.
- g. Laboratory studies of food and milk in science and home economics classes.
- h. Application of recommended school standards (by student council) to total school environment.
- i. Maintenance, repair and cleanliness of sanitary facilities.

2. Suggested Activities.

- a. Provide experiences in home pasteurization and home canning.
- b. Survey community to determine application and observance of Federal, State and local laws.
- c. Visit water and sewage plants, including laboratories, and have procedures explained.
- d. Arrange for demonstration of special equipment used by sanitarian.
- e. Discuss proper uniforms for food handling personnel.
- f. Organize sanitation committee within student council if needed.
- g. Make models to exemplify rat proofing, screening, drainage, etc.
- h. Construct and repair sanitary facilities.

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7. Blakeslee, T. B., *The Killer Cornered*. Public Affairs Pamphlet. 22 East 38th Street, New York 16.

SOURCES.

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2. The State Board of Health, Raleigh, N. C.

3. The N. C. Tuberculosis Association, 105 Harrison Ave., Raleigh, N. C.
4. American Medical Association, 535 N. Dearborn Street, Chicago, Illinois.

Sanitation.

BOOKS AND BULLETINS:

1. Ehlers and Steel. *Municipal and Rural Sanitation*. McGraw Hill, New York.
2. From the State Board of Health, Sanitation Division, Raleigh, N. C.:
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 Laws, Rules, Regulations and Code Governing the Sanitation of Private Hospitals, Sanatoriums, Sanitariums, and Educational Institutions.
 Laws, Rules, Regulations and Code Governing the Sanitation of Restaurants and other Food Handling Establishments.
 Laws, Rules, Regulations and Code Governing the Sanitation of Hotels, Tourist Homes, Tourist Camps, and other Lodging Places.

SOURCES:

1. Local Health Department.
2. North Carolina State Department of Agriculture, Raleigh, N. C.
3. School of Public Health, University of North Carolina, Chapel Hill.
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5. Division of Sanitary Engineering and Laboratory of Hygiene, State Board of Health, Raleigh, N. C.
6. United States Department of Agriculture, Washington, D. C.
7. North Carolina State Department of Labor, Raleigh, N. C.
8. North Carolina State Department of Conservation and Development, Raleigh, N. C.

COMMUNITY HEALTH

POINT OF VIEW

It is recognized that the school is an integral part of the community and thus the school health program might properly be considered a part of the community health program. However, for purposes of clarity, the term "community health" is used here to designate all health education activities which take place outside of the school.

Many aspects of what is termed the school health program are carried on by other than school personnel working in the school. At the same time many of the experiences which the school age child has outside of the school have definite influence on his health. Therefore, administrators, supervisors and teachers, in planning and conducting the school health program, must give full consideration to worthwhile opportunities for health education experiences outside of the school as well as in the school.

There are two important ways in which the community and school health programs are related:

1. Community resources are used by the school to help meet the child's health needs.
2. The school helps the pupil improve community living through:

Participating in organized activities in the community.
Becoming a better adult citizen after he leaves school because of having worked with community agencies while in school.

Working to protect, maintain and improve his own health.

Another way of expressing this two-way process is cooperation. "What the school initiates, the community continues. What the community demands, the school supports."¹

Just as in all good curriculum work, there should be cooperative planning to carry on projects involving all school members. A good example of a total school community project is "Petersburg Builds a Health Program," Bulletin 1949, No. 9. U. S. Office of Education, Washington, D. C., which gives a description of a continuing school-community health project.

¹Health Education, American Medical Association and National Education Association. 1948. 1201 Sixteenth St., Washington 6, D. C.

HEALTH RESOURCES IN THE COMMUNITY

Every teacher will need to locate and use the health resources in the community to help:

1. Maintain and improve the health of children and youth.
2. Teach the pupils about the health services available in the community for use by them now and in their adult life.
3. Find community needs.
4. Participate in community projects to improve the community.
5. Create an understanding among the pupils for the need to support community services.

Listed below are some of the resources for health education to be found more or less in every community—both personnel and material resources in addition to those found in the school:

The Home (parents).

Parents have the first responsibility for the health of their children. Even though this is true and accepted, the school health program often breaks down at the point where parental cooperation is required. The North Carolina Education Commission study² showed that the chief health problem, as reported by principals, was that of getting physical defects corrected after they had been discovered. At least a part of this failure is due to inadequate health education of parents. Therefore, a major objective of the school health program should be to prepare students for the responsibilities of parenthood before they graduate or quit school. Also the school should take an active part in providing opportunities for parents to be active in the school health program and to get up-to-date information about how to protect and improve the health of their children.

Parental interest and cooperation can be increased by involving them in a school health activity, especially where their own children are concerned, such as the school health examination. Other activities where parents may work and learn are: serving on a health committee or council, taking part in special health projects, participating in discussion groups at P.-T.A. meetings, and working on special studies, such as "Why parents send sick children to school."

²Education in North Carolina—Today and Tomorrow, the Report of the State Education Commission, Published by the United Forces for Education, Raleigh, N. C.

1. Responsibility for Planning and Budgeting for Medical Care.

- a. Every parent should get regular medical and dental examinations for his children and for himself, too. The parent, as well as the doctor, should be interested in the medical examinations being thorough enough (1) to discover any physical defects and signs of illness, rather than a cursory inspection in order that the physician may sign a health certificate, and (2) to give the person examined a good appraisal of his health.
- b. Parents should assume the responsibility for providing medical and dental services for their children and themselves. Medical and hospital insurance can be of great financial assistance in helping parents in cases of accidents and illnesses requiring hospitalization and/or surgery. Parents and high school students should know about the various insurance plans:

What do they provide? (The fine print is important.)

How nearly do they cover the needs of the whole family?

What type of policies are available in the community, State and Nation?

How do the prices compare for the different plans offered by non-profit organizations and commercial companies? How do their benefits compare?

2. Parents Responsible for Choosing and Utilizing Professional Dental and Medical Services.

The following questions should be carefully considered in choosing a doctor or dentist:

What does the patient expect of the doctor or dentist?

What does the physician or dentist expect of the patient? (In addition to pay.)

Where can a parent or high school pupil get reliable information about physicians and dentists?

What criteria should be used in the selection of a "medical specialist" for eyes, ears, emotions, orthopedic, skin diseases, etc.

The following materials which may be purchased from the American Medical Association, 535 North Dearborn St., Chicago, Ill., may be found useful in the study of this topic:

McKeever. *How To Choose a Doctor.*

Reichert. *How to be an Intelligent Patient.*

How Much do Blue Cross and Blue Shield Health Insurance Plans Pay.

Official Agencies.

An official agency is one supported by tax funds. The two official agencies in North Carolina other than schools that render most services to the school children are the local public health department and the local department of public welfare.

1. *Services Available from the Local Health Department.*

In North Carolina most all health services to schools are rendered by the personnel from the local health department or by personnel under their guidance and supervision. Every county in the State has a health department.

In the "Health Services" section of this bulletin are listed some of the specific services provided to schools by personnel from the local health department. The local health department serves the total community including the school by providing the following services:

a. Protection against disease.

Immunization clinics.

Home nursing visits.

Tuberculosis—keeps list of cases and their contacts, holds chest X-ray clinics, and refers cases to physicians and sanatorium.

Venereal disease control—makes diagnosis of cases, provides treatment, and follows contacts to find other cases.

Epidemiology—traces the sources of diseases in the community to prevent other cases.

b. A clean community.

Food—education of foodhandlers and inspection of food handling establishments.

Milk—inspection of dairy farms and pasteurization plants.

Rural Sanitation—helps families plan safe water supply and sewage disposal. Test water when requested.

City Water Supply—samples are sent to State Board of Health regularly for testing.

Rats, Flies, Mosquitoes—advises on ways of control.

Garbage Disposal—provides information on safe garbage disposal.

Schools—inspections to assure that facilities meet health standards.

Resorts—inspected regularly.

c. Health of mothers and children.

Before the baby is born—public health nurses make home visits. Encourage mothers to secure medical care early in pregnancy.

When the baby is born—public health nurses will visit home to teach mother infant care. Premature infants are hospitalized.

During pre-school years—well baby clinics to provide medical supervision, give immunizations, offer information to parents. Pre-school clinics (in preparation for school) are held in cooperation with schools, P. T. A., medical and dental societies.

During school years. (See section on Health Services.) Physically handicapped—regularly scheduled orthopedic clinics are held.

d. Study and action for community health.

The health department helps to keep the public informed. This is done by all the health department staff including trained health educators in some departments who work with community groups, schools and organizations.

e. Important records.

Birth and death records.

Records of contagious diseases.

Health department record of services provided to individuals, families and communities.

Special records of studies of population, causes of death, etc.

f. Laboratory services.

Laboratory services are available in the local health department and/or at the State Board of Health (Laboratory of Hygiene) for:

Testing water and milk.

Aiding in diagnosing diseases.

g. Other services provided.

Certain other services are provided cooperatively with other groups or by the State Board of Health on request. Some of these services are:

Cancer clinics—in a few places.

Mass X-ray survey—mobile X-ray trailers available to counties.

Mental hygiene and child guidance clinics—a few located over the State.

Film services—films are free (except for return postage) on request through the local health department or from the State Board of Health.

Nutrition service—by request through the local health department.

Dental health—inspection for children under twelve and some dental care for those who can't pay. Available periodically upon assignment from the Oral Hygiene Division, State Board of Health.

School Health Coordinating Service. (See Implementing the Program and School Health Plan, this bulletin, and Handbook for Elementary and Secondary Schools, pp. 25-27.)

2. *Services of the Department of Public Welfare.*

In each county there is a department of public welfare with a superintendent, one or more case workers and clerical workers. In addition many counties have child welfare case workers. The department of public welfare carries on many kinds of services to the people of the community including services related to the health of children, youth and adults.

Local welfare departments render the following child welfare services:

Placement of children in foster homes or child-caring institutions.

Locating foster homes.

Adoptions.

Behavior problems of children.

Cases involving custody of juveniles.

Psychological examinations including special school projects.

Services to crippled and handicapped children.

Applicants for admission to State School for Deaf, Dumb, and Blind.

Admissions to institutions for feebleminded.

Employment certificates to minors.

Referrals to health department for clinical service for children.

Juvenile court.

Investigation of cases.

Probation supervision.

Investigation for commitment and supervision of children conditionally released from State training schools.

Supervision of boarding homes for children.

Assisting in development of recreation facilities.

Cooperating with schools in attendance problems.

Work with unmarried mothers.

In addition to the child welfare services, the Department of Public Welfare offers many services to adults which in many cases have some influence on child health; for example, aid to dependent children.

3. Services of the N. C. State Commission for the Blind.

All school children who can qualify for services on the basis of financial need determined by local Departments of Public Welfare.

a. Eye examinations.

1. Group eye clinics held by the Commission for the Blind in cooperation with schools, local health and welfare departments.

2. Continuing eye clinics: Raleigh, Asheville, Charlotte.

3. In physician's offices.

4. Eye examinations available through the following out-patient clinics:

Baptist Hospital, Winston-Salem.

Duke Hospital, Durham.

McPherson Hospital, Durham.

University Hospital, Chapel Hill.

b. Follow-up eye surgery, treatment and hospitalization when recommended by the examining eye physician.

c. Glasses are purchased at special rates.

In addition to services to school children, the N. C. Commission for the Blind offers many services to adults who can be certified on needs basis through local departments of public welfare.

4. *Other Official Agencies that Offer Health or Related Services.*

There are several other tax-supported State agencies, with headquarters in Raleigh, North Carolina, which provide some health services or carry on health and safety activities in local communities. Some of these are:

- a. North Carolina Alcoholic Rehabilitation Program.
- b. North Carolina Council of Civil Defense.
- c. Agriculture Extension Service.
- d. Highway Safety Division of the North Carolina Department of Motor Vehicles.
- e. North Carolina Medical Care Commission.
- f. North Carolina Department of Labor.
- g. North Carolina Department of Agriculture.

Voluntary Health Agencies.

A voluntary agency is supported by contributions, not tax funds. Certain voluntary agencies have been developed by individuals and groups who were aware of a need and were determined to do something about it. Voluntary agencies are free, to a certain extent, to engage in experimental pursuits. Often these agencies pave the way by demonstration and experimentation of some health activity which some official agency may take over later if the activity proves to meet a real need.

Most of the work in the voluntary organizations is done by volunteers.

Listed here are some of the voluntary agencies and a statement of their services as summarized by the respective agencies:

AMERICAN CANCER SOCIETY, N. C. DIVISION, INC., HAYNES BUILDING, MOUNT AIRY, NORTH CAROLINA.

1. *Services to Schools.*

Provides abundant educational literature and films for school use. (Special cancer kits are available to all teachers.) Joins 50-50 with county welfare depart-

ments in defraying hospitalization and treatment expenses for needy children suffering with cancer. Maintains a State speakers' bureau to provide groups with qualified speakers on cancer. Assists in support of free cancer detection-diagnostic centers in some counties where, upon recommendation of the family physician, children may be admitted for examination.

2. *How Schools Get These Services* (local, State and National).

By applying to commanders of county units of the American Cancer Society, local welfare departments, local public health departments, or writing directly to State headquarters, depending on the service desired.

3. *Summary of Other Services to the Community.*

Education of the public and the medical and nursing professions; provides volunteer workers for free cancer detection-diagnostic centers; some county units make surgical dressings, comfort kits, etc., for cancer victims; transportation of cancer patients to cancer clinics, hospitals, etc.; rehabilitation; maintains cancer nursing home, The North Carolina Cancer Institute, at Lumberton, N. C., for terminal cancer cases (all races).

N. C. HEART ASSOCIATION, MILLER HALL, CHAPEL HILL, NORTH CAROLINA.

1. *Services to Schools.*

The North Carolina Heart Association and its affiliated chapters offer assistance with institutes, workshops, discussion groups, and lectures for teachers and P. T. A. groups, as well as materials and other aids. Cooperation with the school health program is an essential phase of the Association's approach to the problem of heart disease control. Through its special interest in rheumatic fever and congenital heart disease, all phases of school health come within its concern. Areas, such as homebound teaching, in-service and pre-service training of teachers and cooperation in school health councils, are included in the rheumatic fever program. Heart Association members are interested in opportunities to serve on cooperative working committees related to school health. Materials available

include: pamphlets, films and filmstrips, exhibits, and posters. At present there is only a little material appropriate for classroom use; most of the material is useful for teachers themselves and for P. T. A. groups.

2. *How Schools Get These Services* (local, State and National).

Local chapters of the Heart Association, as of January 1953, are to be found in the following places: Cabarrus County, Caldwell County, Charlotte and Mecklenburg County, Durham-Orange Counties, Edgecombe-Nash Counties, Gaston County, Greensboro, Statesville, Lenoir County, New Hanover County, Salisbury and Rowan County, Wake County, Wayne County, Wilson County, Winston-Salem and Forsyth County, and Cleveland County. (Contact the State office, if unable to obtain local address.)

The address of the *American Heart Association* is 44 E. 23rd Street, New York 10, New York. This Association produces many educational materials which are channeled through State and local organizations.

3. *Summary of Other Services to the Community.*

The Heart Association has a program which includes research, education, and community service. Not all services are now available from every local chapter, but the following is a list of the main services offered in North Carolina: case finding (through surveys, and other means); clinics (sponsored or assisted where advisable); diet consultation; education programs for lay and professional groups; information and referral services for patients and their families; loan closets of sick room equipment; rehabilitation through consultation for cardiac housewives and the cardiac in industry; study groups for patients' families; recreation and home tutoring programs for homebound cardiac patients.

THE N. C. MENTAL HYGIENE SOCIETY, INC., ROOM 568, EDUCATION BUILDING, BOX 2599, RALEIGH.

1. *Services to Schools.*

A small amount of literature and plays on mental health subjects are kept for distribution. Information

is given about agencies, organizations, and persons who can provide the services for individuals in need of help on mental and emotional problems. A major function is coordination and education. The Society promotes the efficient use and needed expansion of existing resources and the establishment of new ones for which the need has been demonstrated.

2. *How Schools Get These Services* (local, State and National).

By contacting the North Carolina Mental Hygiene Society office.

3. *Summary of Other Services to the Community.*

The educational program of the Society is carried out through its committee activities, an annual meeting held in the spring, and an institute in the fall. A newsletter containing mental health information relating to North Carolina is sent to all members. Local societies carry out various projects relating to the promotion of mental health activities.

NATIONAL FOUNDATION FOR INFANTILE PARALYSIS, INC.,
CARL SMITH BUILDING, P. O. BOX 390, CHAPEL HILL,
NORTH CAROLINA.

1. *Services to Schools.*

National Foundation for Infantile Paralysis Chapters provide financial assistance for hospitalization, doctor's bills, braces, transportation, etc., as needed for polio cases. Free publications, posters, filmstrips, and exhibits are available for teachers and pupils for classroom use. Financial assistance is available to college students who qualify for National Foundation for Infantile Paralysis scholarships and fellowships. Grants are made by the National Foundation for Infantile Paralysis to colleges and universities for research.

2. *How Schools Get These Services* (local, State and National).

Each county has a chapter of the N.F.I.P. which has jurisdiction over the patient-care program. Publications and visual aids may be obtained through the State

office or from National headquarters. Scholarships, fellowships, and grants are made from National headquarters.

3. *Summary of Other Services to the Community.*

The N.F.I.P. provides emergency personnel and funds in epidemics; collaborates with medical and health authorities in preparation for polio outbreaks; provides for professional training courses; and publishes and distributes information for professional and lay use; and plans and finances research into cause, prevention and treatment of polio. All members of the community benefit from the Foundation's three-fold program of patient-care, education, and research.

THE AMERICAN NATIONAL RED CROSS, 230 SPRING STREET,
N.W., ATLANTA 3, GEORGIA.

1. *Services to Schools.*

The American Red Cross makes a contribution to the physical, mental, emotional, and social health of pupils by providing a medium of self-expression through service to their fellow human beings, which not only provides understanding and factual information and develops skills, but helps mold healthy habits and attitudes toward themselves and others. It provides courses and factual material, visual aids, safety guides for grades 1-6; first aid courses for grades 7-12; mother and baby care and home care of the sick for those 14 years of age and over; accident prevention materials; swimming and water safety courses, films, materials; and authentic materials, films, and charts on blood.

To the teachers the Red Cross provides: First aid courses for personal and instruction purposes, mother and baby care for personal use, home care of the sick, and swimming and water safety courses for personal and instruction purposes.

2. *How Schools Get These Services* (local, State and National). Schools can get these services through their local American Red Cross chapter, through volunteer membership in the Junior membership division of the American Red Cross and by participation in the activi-

ties and efforts of the membership to serve others and thus to serve themselves, and through the Southeastern Area Office for the American National Red Cross.

3. *Summary of Other Services to the Community.*

This information is limited to services in the field of health and safety only: First aid instruction for adults, mother and baby care and home care of the sick instruction for adults, disaster prevention, preparedness, and rehabilitation, casework services to families of men in the armed forces and veterans, services of trained volunteers in hospitals, procurement of blood for civilian and military hospitals and for defense purposes, program of safety and accident prevention, swimming and water safety courses for adults, recruitment of polio nurses, and training of volunteer nurses aides for service in hospitals and clinics.

NORTH CAROLINA SOCIETY FOR CRIPPLED CHILDREN AND ADULTS, INC., 212 E. ROSEMARY ST., CHAPEL HILL, N. C.

1. *Services to Schools.*

Sponsors special education in teacher training institutions of higher learning to relieve the shortage of such personnel, speech clinics for children with speech and hearing problems and clinics for slow learners; loans audiometers for surveys of hearing problems; gives direct services, makes referrals and consults with parents and chapters regarding additional services, facilities, and trained personnel to help handicapped children; operates a film loan service; distributes reprints, books and booklets on subjects relative to all handicapping conditions, especially cerebral palsy; organizes and conducts institutes and parent study groups for parents of handicapped children; carries on public education through special news letters, newspapers, radio, and television; provides through the national office personnel placement service and consultation service with experts in the field of education and treatment; furnishes special equipment and gives scholarships for teachers for special education classes and provides transportation for children to and from such classes; furnishes teachers for homebound chil-

dren and home to school telephone systems for home-bound children; provides direct medical care to children not eligible for crippled children's services, dental services to children not included in the school health program and glasses to children when other funds are not available.

2. How Schools Get These Services.

To get these services from State or the National Society, write to N. C. Society for Crippled Children. To get these services from local chapter, simply call or write the local chairman.

3. Summary of Other Services to the Community.

The aim of the Society in the State is to help co-ordinate the services of all agencies in North Carolina, both State and local, to give better service to more children who are in need of help. In some places the chairman meets regularly with other health and welfare groups so that all may be better acquainted with what services are available and with how they can all work together in order to do a better job.

NORTH CAROLINA TUBERCULOSIS ASSOCIATION, 2620 HILLSBORO ST., RALEIGH, NORTH CAROLINA.

1. Services to Schools.

Provides consultation services on school health programs, assists in organizing school health councils or committees, aids in developing school health policies, and cooperates in teacher training through workshops, institutes, conferences and by providing scholarships. Cooperates in X-raying of high school students and school personnel, supplies supplementary aids, films, filmstrips, posters, charts, booklets, guides and bibliographies and promotes journalism through school press projects.

2. How Schools Get These Services (local, State and National).

Requests are made to local associations or committees. These local affiliates contact State and National offices for aid, if needed.

3. *Summary of Other Services to the Community.*

Community organization for health education; co-operative health program with North Carolina Extension Service; educational program for social and civic organizations; developing, enlarging and improving programs for tuberculosis control.

Other Organizations.

The Directory¹ of the N. C. Health Council (1952) contains a list of the services and resources of many official and voluntary agencies and other organizations and associations in North Carolina which have some concern for health.

IMPROVING THE QUALITY OF LIVING THROUGH EDUCATIONAL EXPERIENCES

The use of community improvement projects in the area of health is no different in basic principles from the use of other types of community improvement projects. The experiences should grow out of children's interests and should enrich their previous experiences. The range of activities involved should be broad enough to permit all children in the group to participate and to find success. The activities should, in so far as possible, be self-directed by the children with the teacher's role that of a more mature and more experienced guide and counselor. The development of language and number skills and the development of good citizenship and good home membership attitudes, as well as training in good health principles and practices, should consciously be brought into the project.

The activities suggested below are not complete and even though they are recommended for certain grades, the teacher may find that her group would profit more by activities recommended for another grade.

The experiences that the pupil will have in carrying on these activities should result in:

Providing information to the students regarding community health resources.

Making better use of community resources.

Improving community health resources.

¹May be secured from Health Publications Institute, Raleigh, N. C.—75c.



First grade pupils rake leaves and trash

GRADES 1-3

1. Field trips—leave place clean; refrain from breaking shrubbery or marring other property.
2. Observe signs in the community: “Keep off the grass,” “Use walkway,” “Put trash here.”
3. Keep community clean—for example, don’t throw trash on floor at picture show; don’t throw bottles at ball games.
4. Keep bicycles, tricycles, scooters, wagons, etc., off the sidewalk when not in use.
5. Help rake leaves and trash and put in proper receptacles.
6. Enjoy parks, playgrounds, clean public buildings and grounds.
7. Obey quarantine signs.
8. Learn to enjoy and appreciate community helpers and resources.
9. Stay at home when ill.
10. Be friendly to everyone. Learn about the work of others.
11. Involve parents in community activities. For example, (a) going on field trips with pupils; (b) participation in community development program.

GRADES 4-6

1. Follow up on some of the things found during surveys or by observation.
2. Cooperate in clean-up campaigns. Help keep community clean.
3. Play in safe places.
4. Leave strange dogs alone. Keep own dog tied, or in pen if living in town.
5. Surveys.

- a. Health hazards—

- Unsafe and inadequate water supply.
- Unsafe sewage disposal facilities.
- Garbage heaps.
- Dirty streets, play areas, etc.
- Poor housing conditions.
- Boards, rocks, trees, etc., in play areas.

- b. Safety hazards—

- Broken glass.
- Shrubbery obstructing view.
- Streets not adequately marked.
- Traffic not adequately directed.
- Boards, rocks, trees, etc., in play areas.

A good example of this type of project was developed by a fifth grade class. The students, as they came to school, noticed the unsightly condition of the back alleys. Discussion brought out that scattered garbage caused this condition. Committees were appointed and the city official in charge of garbage collection was interviewed. He pointed out that the poor quality of garbage receptacles was largely responsible for the condition. The best type of receptacle was determined and the children were able to get a local merchant to stock and sell these at cost. Other student groups became interested and parents all over the city cooperated by buying good garbage cans. The city cooperated by developing a regular and frequent schedule of garbage collection. As the project developed, many natural opportunities were found for learning experiences in public health as well as in other areas. In the end, the children felt the satisfaction of having rendered a worthwhile service to the community.

6. Continue same activities as in grades 1-3 when they fit into program:

- Field trips to health department, dairy, water plant, etc.
Visiting community helpers, learning about their work.
7. Camping activities that emphasize good health and safety practices.
 8. Hikes.
 9. Solicit help of parents to carry on—
Field trips.
Camping trips.
Certain surveys.
 10. Become acquainted with community resources. For example, a 4th grade visited the local health department, talked with the personnel in the department, saw the film, "Mr. Williams Wakes Up," then wrote a radio script and broadcast it over the local radio station.
 11. Participate in the *educational phases* of "money-raising" campaigns, such as T.B., Cancer, Polio, Heart, Crippled Children.
 12. Pupils may assist with improving mail boxes in rural areas, road signs, home-place name signs.

GRADES 7-8

1. Continue activities of grades 1-3 and grades 4-6 where they are of interest and serve the need of that particular group.
2. Study the needs of the community as indicated by prevalence of disease, epidemics and death rates (See "Communicable Disease" section).
 - a. Housing survey—of own homes.
 - b. Restaurant surveys—sanitarian cooperating.
 - c. Dairy surveys—sanitarian cooperating.
 - d. Animal and insect pests—sanitarian and farm agent cooperating.
 - e. Outdoor privy survey in rural areas (See Section on Sanitation).
3. Plan for follow-up on findings of surveys.
 - a. Check with written standards and professional and technical personnel to see how good or bad conditions are. (All this under the careful guidance of the teacher, of course.)
 - b. Report findings to group—grade, school or entire unit.



Pupils may assist in improving school grounds

- c. Make reports of findings in form of posters, charts, models, written reports, and oral reports.
 - d. Write news releases.
 - e. Report to governmental officials, civic clubs, P.T.A., and other groups.
4. Cooperate with community groups, such as community betterment projects to improve conditions in community—for example:
- a. Assist in clean-up campaign initiated by Jaycees or other community groups.
 - b. Assist in rat control program carried on by health department or Agriculture Extension Service.
5. Help initiate and carry out projects to improve school and community conditions.
- A few examples of these are:
- a. The pupils in a fourth grade carried on a study of eye health. Their interest and enthusiasm gained the interest and help of the Lions Club, the health department, parents and other school personnel, with the final result that \$10,000 additional money was spent for lights that year and

plans were made for improvements in succeeding years. Also lighting in many homes was improved as a result of the interest of pupils and parents.

- b. A school in one county is a more enjoyable and healthy place because one teacher began a project to improve the lighting. With the assistance and advice of the superintendent, elementary school supervisor, and power company officials, the teacher involved pupils and parents in a project that improved the lighting, ventilation, color of walls and furniture and general decorations of the entire school and of many of the homes of the community.
 - c. In a Negro school the entire school faculty planned and together with pupils and community groups carried on a health survey. They found that sanitation of outside privies, drinking water, and nutrition were their greatest problems. The school led the way and the community helped to accomplish the following tangible results:
 - 58 privies were improved during the school year.
 - 239 wells had water tested and many conditions were improved.
 - 2 typhoid clinics were held.
 - Decreased the percentage of children having "no lunch" from 35% to 6%.
- The entire community was motivated to improve health conditions. Everybody cooperated and enjoyed working.
- d. Other such school-community cooperative activities might include: Rat control, clean-up campaigns, and beautification prospects.
6. Bring to the attention of the people of a community the need for special facilities; for example, a hospital, more medical and dental personnel, recreational facilities, or additional school facilities.
 7. In rural areas work out the specifications and figure cost of a sanitary pit privy. (Consult local sanitarian for specifications.)
 8. Remove any marks from walls of toilet rooms or other parts of building.
 9. Plant shrubs, flowers and grass to beautify school grounds—under supervision and in accordance with plans for improvement.
 10. Cooperate with the health council in programs and projects undertaken.

11. Survey, study, make reports and discuss medical and hospital insurance plans:
 - a. The percentage of people covered in the community.
 - b. The types of policies available.
 - c. The cost to an individual and to a family.
 - d. Comparison of benefits and cost of non-profit and commercial companies. Also compare clauses regarding cancellation of policies. (Read the fine print carefully.)
 - e. The extent to which the various insurance plans meet the need for protection during emergencies.
12. Help promote communicable disease control programs. (See section on "Communicable Disease Control and Sanitation.")
13. Make a conscious endeavor to improve home and community. For example, lighting may be discussed at home along with the discussion at school. Water supply at home may need protecting. The student may be able to take some part in improving these conditions as an outcome of his school activities.

GRADE 9

1. Carry on those projects recommended for lower grades that seem appropriate and needed.
 - a. Visit the dairy to see how milk is handled and find out why it is handled the way it is.
 - b. Visit the health department to learn services available and to whom they are available.
2. Promote and participate in safety patrol activities.
3. Make surveys of the sanitation and other health aspects of meat markets, abattoirs, cafes, grocery stores, snack bars, drug stores, fountain and lunch counters, other eating and food handling establishments, and community recreational facilities both public and private.
4. Have dog vaccinated against rabies and encourage others to do same.
5. Interview representatives of the volunteer agencies in the community to find out the services they render.
6. Make a survey of the number of hospitals in the community and the number of beds and the number of each type of case for which beds are available in each hospital.

7. Find out who registers births and deaths. Encourage the pupils to find out whether they have birth certificates. Discuss the importance of having a birth certificate.
8. Cooperate in activities with reference to protecting the community in time of stress; for example, war, fires, floods, storms, defense against invasion. (See *The Schools and Civil Defense*, State Department of Public Instruction.)
9. Find out how much money is spent in the county or city for public health per person.
10. Make a survey of available professional private health personnel, such as medical doctors, dentists, nurses and other professional health personnel:
 - a. Find out the type of services each of these render.
 - b. Find out the kind of training required for each professional group.
 - c. Discuss:
 - The importance of having a regular family physician.
 - What factors should be considered in choosing a family physician and dentist.
 - How to choose the best specialist.
 - d. A committee might want to interview some physician, including the health officer, to get information to report to class regarding health personnel.
11. Evaluate advertisements of products, to see how well the advertisements tell the scientific facts regarding the products' contribution to health.

GRADES 10-12

1. Assist lower grades with any of the above mentioned projects.
2. Carry on any of the activities suggested for the lower grades when they are needed to solve a problem or when they were not experienced in a lower grade.
3. Follow through on information found through surveys by lower grades or conduct such surveys and arrange for follow-up work in cooperation with community leaders.
4. Plan a family budget (Use actual figures or hypothetical ones for size of family and income) to include:
 - a. Healthful and safe housing.

- b. Adequate and nutritious food.
 - c. Clothing.
 - d. Insurance—hospital, medical accident, retirement, death.
 - e. Medical and dental care.
 - f. Amusement and vacation.
 - g. Other.
5. Cooperate in and help carry on community activities such as chest X-ray, hookworm, diabetic, and nutrition surveys:
 - a. Learn more about prevalence, cause, and how to prevent tuberculosis, hookworm and diabetes.
 - b. Encourage parents to participate in surveys, especially mass X-ray survey if one is being conducted in the community.
 - c. Distribute health education materials to people in the community.
 6. Participate in the health educational activities of voluntary agencies.
 7. Survey or review services of the health department—the persons employed and services each renders. (See “Health Service” section.)
 8. Review services by department of public welfare.
 9. Learn something of the number and services of physicians, dentists, and other private medical personnel in the community.
 10. Survey the contributions to health of the various other organized groups in the community—Lions Club, Women’s Clubs, Kiwanis Club, P.T.A., etc.
 11. Assist teachers in primary grades with health activities for their children—weighing, measuring, etc.
 12. Where conditions in the community, including the school, do not measure up to standards as determined by professional personnel and approved standards, work to improve these or to get these improved. Some of the ways of doing this may be:
 - a. Individual conferences.
 - b. Written reports, charts, bulletins, pictures, and speeches.
 - c. Through other groups—Other classes in schools; P.T.A.; Governmental groups.

Evaluation.

As in other learning experiences, the evaluation of the effectiveness of the use of community resources should be made by students and teachers in terms of the changes brought about in children's health and in children's behavior. The use of the community as a resource and as a laboratory can be made effective in health instruction, in healthful living and in health services. The progress may be observed through:

Changes in community.

Changes in attitudes of students.

Increase in students' knowledge of and use of community resources.

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PERSONAL HEALTH

NUTRITION EDUCATION

Background Information for the Teacher

In the field of nutrition education, as well as in many other areas of health education, the teacher must realize that by the time a child enters school many attitudes and practices concerning food and eating have already been established. Desirable results from nutrition teaching are obtained when favorable attitudes and practices are developed when needed.

Reasons Which Confirm the Need for Nutrition Education in North Carolina.

1. Proper food selection and good eating habits are basic to good health.
2. Physical examinations of men drafted for service found many cases of malnutrition.
3. Obesity among children and adults is a major health problem.
4. Large numbers of school children have dental caries.
5. A large percentage of school children in all sections of the State, including those from both high and low economic levels, do not include in their diets sufficient quantities of milk, vitamin C foods, and green leafy and yellow vegetables.
6. Children of some farm families that produce nutritious foods do not consume adequate amounts of these foods because they are marketed.

Some Facts About Food.

1. *Functions of food—Accomplished by these nutrients:*

Supply energy

{ Carbohydrate
Protein
Fat

Provide material for:

Growth and repair of body tissue.
Regulation of bodily functions.

{ Protein
Minerals
Vitamins

2. *A variety of foods needed.*

A variety of foods is needed every day to supply the nutrients listed above. One guide to insure a variety is the basic seven food plan. This plan provides an easy method for selecting a diet wisely.

Copies of the basic seven chart (poster size for classroom and notebook size for pupils) may be secured free from the American Institute of Baking, 400 E. Ontario Street, Chicago 11, Illinois.

3. *The Amount of food needed.*

The amount of food a healthy individual needs depends upon his age, sex, size and the type of activity in which he is engaged.

Pupils should know that foods differ in nutritional value. Some foods are low in calories and high in other nutrients, whereas others are high in calories and low in other nutrients.

Some examples of foods low in calories and high in some other nutrients are: skim milk, mustard greens, kale, tomatoes, carrots, and eggs.

Some examples of foods which are unusually high in calories but low in most of the other nutrients are foods containing large amounts of sugar, flour or fats, such as cakes, soft drinks and candies. The number of calories depends upon the ingredients used in the food or drink.

A person should first consult his family physician before going on a special diet for any reason.

4. *Some factors that affect nutrients in foods.*

Storage.

Preparation.

Serving.

Soil.

Factors Which Influence Eating Habits.

1. Knowledge.

2. Availability of food.

3. Customs developed because of religious belief, geographical location, nationality, and family association.

4. Attitudes regarding color, texture, odor, method of cooking, seasoning and flavor.
5. Income and prices of foods.
6. Attitudes, practices and statements of teachers.
7. Food fads, high powered advertisements, and claims about certain foods.

Food Service at School.

Every school child in North Carolina should have an adequate diet every day. Lunch at school for most children provides only about one-third of their daily food requirements.

1. Advantages of the School Lunch.

Lunch at school is a regular part of the school program. It is a convenient and valuable service in the present day school program, with bus transportation of children, mothers employed outside the home, and the many hazards facing children when off the school campus.

The school lunch offers unlimited opportunities for educational and social development of the child through eating with his classmates, learning to eat new foods, developing good food habits and table manners.

Type A lunch, the minimum standard set forth below, as prescribed for the National School Lunch Program should be adequate for the majority of children. Many high school students, particularly boys, like and need larger servings of food, whereas some small children find the servings to be too much.

Milk—One-half pint plain, whole, pasteurized milk.

Protein food—Two ounces of cooked meat or fish, two ounces of cheese; one-half cup cooked dried peas, beans, or soybeans; four tablespoons of peanut butter; or one egg. (The full amount of cheese or peanut butter is more than can be comfortably eaten in one meal. Only about half the amount should be used, and the remainder made up from another protein.)

Vegetables, fruits—Six ounces (three-fourth cup) raw, cooked or canned vegetables and/or fruit.

Bread—One portion of bread, muffins or other hot bread made of whole grain cereal or enriched flour.

Butter or margarine—Two teaspoons of butter or fortified margarine.

Dessert—A simple dessert is desirable but is not necessary every day.

The noon meals of school children, important as they are, provide only about one-fourth of a week's meals, nine months out of the year. Every effort should be made to encourage parents to provide adequate food for each child at other meals. For some children, the noon meal at school may be their best meal. These facts make it most important that school administrators and parents make sure every child has an opportunity to use his lunch funds for an adequate lunch.

2. The Packed Lunch.

If children bring lunches from home, special care should be taken to make these lunches adequate and appetizing every day.

A wholesome lunch can be provided by including:

Milk, purchased at school or supplied from home.

A protein food which may be in sandwich or other form.

Raw fruits and vegetables, or dried fruits.

Whole grain or enriched bread including biscuit or muffin.

Baked desserts, such as cookies, gingerbread, or fruit tarts.

The proper wrapping and packing of the lunch is important if the foods are to be in good condition and have eye appeal for the child when opened. "How to make attractive home-packed lunches" is a topic suggested for adult study through groups in P.T.A., mother's clubs, etc.

When a child is not in a position to have a well-planned lunch, he should be encouraged to bring whatever nutritious food is available, such as baked sweet potato, ham-biscuits, fruit, etc. It is essential that each boy and girl have something nutritious to eat for lunch.

3. Supplemental Food Service at School.

Where supplemental food service is provided, it should:

Be a definite part of the school lunch program.

Be planned by the school lunch personnel.

Include foods that meet a recognized nutritional need of the students participating.

Make a contribution to the child's educational advancement.

Be planned and supervised the same as any other activity.

Not include highly refined foods of high sugar content, such as candy, sweet cookies, and soft drinks which are considered to be harmful to the teeth. Most carbonated beverages, tea, coffee and chocolate contain caffeine or theobromine.

Not be a counter of "snacks" for profit.

Not include foods of poor nutritive value.

Foods served at school parties should meet the same standards. Schools should emphasize the importance of milk, fruit, fruit juices, sandwiches, and raw vegetables as treats for parties and picnics.

Some schools serve a split lunch—the milk or juice at mid-morning and the remainder of the lunch at noon (See Lunch-room Guide issued by the School Lunch Section, State Department of Public Instruction).

4. *Statements by Responsible Organizations.*

a. The National Congress of Parents and Teachers, 600 South Michigan Boulevard, Chicago 5, Illinois, issued the following:

"The National Congress of Parents and Teachers, aware at all times of the needs of children, has recognized the need for a sound program of nutrition education in the schools by creating the parent-teacher School Lunch Committee. The purpose of the committee is to assist schools in developing a program that will give growing children experience in building sound food habits so necessary for their health and well being.

"The sale of carbonated beverages, candy, and other confections in schools may interfere with effective nutrition education. Many children spend lunch money for these less nutritious foods and are at the same time deprived of a valuable learning experience. In this connection we call attention to a similar statement made by the Council on Foods and Nutrition of the American Medical Association.

"We recognize that the sale of these items in schools is an *administrative problem* and that the responsibility of the parent-teacher organization is *interpreting to parents* the dangers involved in substituting these items for milk and other more nutritious foods in the child's diet,

so that parents will give administrators the backing needed to remedy this situation.

"We also rededicate ourselves in this time of national emergency to the continuing task of providing adequate public support for schools in order that administrators may not feel the pressure for school funds great enough to demand the sale of such items, the profits from which supply auxiliary funds needed in many schools for enrichment materials.

"We have increasing confidence that school administrators in any community, when they have the complete cooperation of parents, can make any change in practice found necessary for the welfare of our children."

b. The American Medical Association, Council on Foods and Nutrition, issued the following official statement in the Journal of the American Medical Association May 6, 1950:

"One of the valuable functions of the school lunch program is to provide training in sound food habits. Of considerable significance in the adoption of such a program is the sale of food, confections, or drinks on the school premises; opportunities to purchase food and drink at nonlunchroom concessions bear directly on the food habits established in the child. School children generally have a limited sum of money for the purchase of their daily lunch. If a portion of this money is spent on substances of limited nutritional value, the value of the lunch which a child may obtain with the remaining money obviously is reduced. The availability of carbonated beverages on school premises may induce a child to spend his money for these and allow him to develop poor dietary habits. *This is especially true for the younger children.* Expenditure for carbonated beverages yields a nutritional return much inferior to that from a similar sum spent for milk or other staple foodstuff. Furthermore, when given a choice between carbonated beverages and milk to accompany a meal, a child may frequently choose the less nutritious beverages. In view of these facts, the Council believes that carbonated beverages should not be sold on school premises."

c. The Council on Dental Health, American Dental Association, at its 91st Annual Session, Atlantic City, New Jersey, October 25-27, 1950, adopted the following resolution:

"Whereas, the consumption of candy, soft drinks and other confections prepared with concentrated fermentable sugar is associated with an increase in dental caries, and

Whereas, the excessive ingestion of such confections replaces and reduces the use of more complete and nutritive foods, therefore, be it

Resolved, that the sale of candy, soft drinks and other confections in schools be discouraged.

Resources for Additional Help for the Teacher.

The following resource persons are available to most teachers in planning the nutrition education program:

1. *Personnel.*

a. School personnel.

Educational supervisor.
Lunchroom supervisor.
Lunchroom manager.
Home economics teacher.
Health teacher or health educator.
Agricultural teacher.

b. Health Department Personnel.

Nurse.
Health Officer.
Health educator.
Nutritionist.
Physician.

c. Extension Service Personnel.

Home agent.
Farm agent.

2. *Selection of Materials.*

The teacher with the guidance of resource persons has the responsibility for selecting materials for use by the class.

a. Nutrition materials should be selected that:

Are scientifically correct.
Teach a balanced diet.
Follow good educational principles.
Help meet a recognized need of the boys and girls in the class.
Are suitable as to grade level.

b. Nutrition materials should not be selected that:

Incorrectly promote some food as being of greater importance than others.
Promote a food which has limited nutritive value.
Promote or advertise a special brand name as being superior to other brands that are equally as good.

Guides For Working Out A Program of Nutrition Education.**GRADES 1-3****Desirable Outcomes in Terms of Knowledge, Attitudes and Practices.**

1. Likes to eat a variety of foods.
2. Practices safe food handling.
3. Learns that all persons, animals, and plants need food for growth.
4. Knows that there are different food groups.
5. Understands that teeth and bones grow and need food for growth.
6. Realizes that sweets should be eaten with moderation and, as a rule, only after meals.
7. Learns that milk and fruit are good foods to eat "between meals."
8. Knows to wash hands before eating.
9. Understands that food is important in maintaining good health and in preventing illness.
10. Appreciates pleasant surroundings during meal.
11. Appreciates the work "mother" does in the home in preparing good meals.
12. Practices table manners suitable to his age.
13. Knows that some green and leafy vegetables should be eaten everyday.

Suggested Activities and Experiences.

1. Children talk about the foods they eat at home.
2. In the first grade, or any other grade where they have not used the school lunchroom before, the children may go to the school lunchroom with their teacher before they are to be served for the first time.

Pupils should wash their hands, go through the line, get tray (or whatever is to be used in the lunchroom), be seated at the table, eat imaginary food if it is not practical to eat real food, return soiled dishes, and leave the lunchroom.

3. The actual experience at lunch time should provide opportunity to encourage pupils to talk about the good foods on their plates. If there are children who are not eating any

food or any of a certain food, they should not be scolded or pointed out. Later let some of those children who didn't eat a certain food bring this food to the classroom. Discuss it, let children handle it, and taste it if it can be eaten raw.

4. Following are some things which may be done to help the home:

A menu from the school lunchroom may be sent home.

The children may write recipes including those foods lacking in their diets.

The nurse may help the teacher in providing information to the parents concerning foods needed in the diet.

Parents may be invited to join a discussion group on nutrition.

A list of low cost diets may be made available to those homes with very limited incomes.

Some children may be able to get supplements at school—mid-morning—milk, fruit, or fruit juice.

5. When a new food is to be served in the lunchroom, a small portion may be brought into the classroom to discuss, handle, prepare and taste. This may prevent an experience such as

The lunch period is another class period when all members of the class go to the lunchroom



actually happened in one school where prunes were being served. One little boy said, "Don't put that old 'simmon on my plate."

6. Consider the lunch period as another class period. Encourage children to practice the good habits they have studied or discussed in the classroom.
7. Provide time in the program for children to wash their hands before eating.
8. Discuss foods served in the lunchroom, foods that grow in gardens at home, foods they like to eat and new foods they see in the grocery stores. Encourage children to learn to like some new foods.
9. Discuss foods eaten for breakfast. Emphasize the good foods when they are mentioned.
10. Children may make place mats. Where practical, use these mats in the lunchroom. They may be used in the classroom for a vegetable, fruit or milk party. One school which has no lunchroom uses oil cloth mats spread on the desks at lunchtime; this helps to make the meal a real social occasion.
11. Have a food party and serve one of the following: milk, raw carrots, fruit, fruit juice, raw cabbage or breakfast foods.

Committees may assist by helping prepare food, serving and cleaning up after the party.

Serve or emphasize only one food.

During the party talk about some other ways children have eaten this food.

Make the party fun.

12. Have dramatizations of:

The family at breakfast or dinner.

The milkman bringing the milk.

13. Help pupils practice good cleanliness habits:

Wash hands before meals.

Discard food dropped on floor.

Wash silver dropped on floor, or get a clean piece.

Cover coughs and sneezes.

Refuse to take bites from another child's plate or from food another is eating.



Children learn about new food through a grocery store activity.

14. Plan wholesome refreshments for a special day party.
15. Plan a picnic for the lunch hour or for some other time of day, including foods such as:

- Sandwiches of whole wheat bread.
- Fruit and raw vegetables.
- Cookies (not too sweet).
- Milk or fruit juice drink.
- Boiled eggs.

In the school where there is no lunchroom, the picnic may be a part of a project on "packed lunches."

16. Weigh children every three months (See "Teacher Screening and Observation Record" card) to determine the growth of each child. Discuss the foods the children have eaten during the past month. Talk privately with any child who is failing to gain. A talk with his parents or the nurse may be helpful.
17. Provide for a quiet or rest period following lunch.
18. Plan and take field trips to the grocery, the bakery, a farm, a dairy (not just to get ice cream), a garden.

Evaluation.

1. Do children like wholesome foods and enjoy eating them?
2. Do they seem to get adequate amounts of a variety of foods, including milk, every day?

3. Do they have a minimum of candy, soft drinks and other foods of high sugar content and of low nutritive value? Do they have these only after more desirable foods have been eaten?
4. Have children learned to eat some new foods?
5. Are they looking well and happy and growing at a rate expected according to their previous record?

GRADES 4-6

Desirable Outcomes in Terms of Knowledge, Attitudes, and Practices.

1. Understands that he can use the basic seven plan as a guide in selecting a variety of foods.
2. Knows that cleanliness is important in food handling.
3. Understands something about the nutrients of some of the more common foods.
4. Understands that milk contains nutrients necessary for growth.
5. Knows that he needs vegetables every day, especially the green leafy and yellow ones.
6. Likes most foods, or at least will eat some of each one served.
7. Enjoys meals with the family.
8. Knows that the price of a food is not always a measure of its nutritive value.
9. Realizes that food habits differ in various parts of the world, and that Americans eat foods produced in many parts of the world.

General Approach.

In grades 4-6, pupils begin to ask "why." They begin to recognize that food makes a difference in the way people look, feel and act. Pupils in these grades should learn more about selecting a good diet.

Suggested Experiences and Activities.

1. Continue activities suggested in grades 1-3 where needed.
2. Reinforce the good nutrition education done in grades 1-3.
3. Participate in diet surveys. This may be done in several different ways.

a. Check list:

Prepared by the class.

Prepared by the teacher.

Pupil writes his own list.

b. Develop a questionnaire by the class.

c. Have a personal interview with individual students to get information about diet. The method of interviewing, the friendly feeling between pupil and interviewer, questions about things other than foods, etc., will influence results.

This diet survey may serve many purposes including:

Arouse children's interest (and parent's too) in a balanced diet.

Find some of the needs which may serve as a basis for determining instructional content.

Help children begin to recognize some of the differences between their diet and a balanced diet by comparing the two.

4. Continue the emphasis on lunchroom participation, using the lunchroom manager when practical, for some of the following activities:

Arranging flowers on tables.

Painting friezes or pictures or making posters for walls of lunchroom.

Children sing the blessing; leadership is rotated



Selecting records for soft music to be played during the lunch hour.

Going to lunchroom when lunch is not being served to *practice* setting the table correctly, boys helping girls with their chairs, one person serving as hostess, and other such things that will contribute to the social graces.

Observing and determining what foods are not eaten in the lunchroom and why.

Helping the lunchroom manager plan a menu for one day.

At a time convenient to the manager, going to the lunchroom to learn how foods are stored, prepared and served.

For example, see a large potato masher in action, a dishwasher in action, etc.

5. Plan and carry out food parties. Use foods that need to be emphasized and foods different from those used in a previous party.
6. Plan and carry out field trips when practical. When the entire class cannot visit a place, a committee or an individual may visit and report to class. The following places may be added to those visited in grades 1-3:

Meat market.

Cannery.

Restaurant.

7. Gardening activities may be used. If practical plan a school garden or a home garden. Look at gardens and talk about them. Learn when and how to plant seeds. Arrange a display of garden products. Plant seeds in a classroom "greenhouse."
8. Produce a "basic seven" display of the foods raised in the county.
9. Have class discussions of the following topics:
 - Pictures of animals and fowls which are well nourished as compared to those malnourished.
 - Food habits of people in other lands.
 - Some reasons for eating at a regular time.
 - Ways of making the lunchroom more enjoyable and pleasant.
 - Things that make animals and people grow.
 - Why foods make a difference in growth.
 - Foods from each of the basic seven groups served in the lunchroom.



Animal experiments

10. Participate in role-playing, using one of the following situations:

A family at breakfast, a lunchroom scene, dinner while visiting a friend, or choosing a lunch in a public cafeteria.

11. Carry on an animal feeding experiment in 5th and 6th grades.
12. Each child may include in his health booklet a list of "Foods I've Learned to Eat this Year."
13. Continue to stress good cleanliness habits in food handling.
14. Write letters to parents telling them some things which are being done to improve eating habits.
15. Prepare exhibits and bulletin board displays on various nourishing foods, such as vegetables, milk and fruit.
16. Introduce a new food:

Discuss how it is grown, how it is cooked, and why it is good.

Let children handle, prepare, and eat some of it in the classroom.

If practical plant it in the school garden or in the garden at home.

17. Where there seems to be a need, develop a unit on a particular food, group of foods, breakfast or between meal snacks. For example, one school planned activities concerning milk following a survey showing low milk consumption.
18. Make displays and charts showing food nutrients of:
 - Foods grown in this country.
 - "Cash crop" foods in North Carolina.
 - Foods high in food value—milk, eggs, turnip greens, sweet potatoes, and fruit.
 - Foods limited in food value—soft drinks, candy, etc.
19. Arrange for children to take materials and information home. (Never underestimate the good this type of activity may do in helping parents keep up-to-date.)

Evaluation.

1. Are children growing at a rate expected according to their previous record? Do they look well nourished? Do they seem happy?
2. Do they like a variety of well prepared and attractive foods?
3. Do they eat a variety of foods every day, when available?
4. Do they get enough of the right kind of food?
5. Do they have some understandings of food needs, and facts regarding which foods contain the various nutrients?

Animal experiments



6. Do they know how to choose a good simple meal?
7. Do they usually eat the foods served in the lunchroom?

GRADES 7-8

Desirable Outcomes in Terms of Knowledge, Attitudes, and Practices.

1. Knows that a "daily balanced diet" contains some foods from each of the "basic seven groups" every day.
2. Understands that foods containing vitamin C should be eaten daily, since vitamin C cannot be stored in the body.
3. Knows some of the foods that are rich in vitamin C.
4. Understands that cleanliness in food handling helps to prevent the spread of disease.
5. Knows that milk is the best source of food nutrients needed for building bones and teeth.
6. Realizes that certain foods contain nutrients needed for good dental health.
7. Understands something of the contributions of vegetables and fruits to the body needs.
8. Appreciates good manners at meal time.
9. Appreciates a calm and relaxed atmosphere at meal times.
10. Learns to accept scientific information about foods rather than fads and "hearsay."
11. Shows an attitude of open-mindedness toward food habits of others and especially toward people of other nations.
12. Appreciates the contributions of scientific research and constructive legislation concerning nutrition problems and health standards.

General Approach.

1. Review goals and activities suggested for grades 1-3 and 4-6.
2. Help pupils continue to expand their knowledge of planning and choosing balanced meals.
3. Help pupils study the reasons why food makes a difference in growth, looks, feelings and actions.
4. Emphasize the things most lacking in the group, which may be a good breakfast, green and yellow vegetables, or milk.

5. Avoid non-essential technical information in teaching nutrition except when it seems appropriate because of the interest of the group or of individuals.
6. Keep in mind that only the foods eaten count, no matter how much the child knows.
7. Make observations and pre-tests to find out what pupils already know in order to avoid repetition which may make the study boring or tiresome.

Suggested Experiences and Activities.

1. Students may keep a record of food intake for two or three days.

With the use of a table count the intake of calories and other nutrients.

Compare his daily food intake with the basic seven plan and with established minimum daily requirements.

2. Plan group work, panel discussions, committee work, round table discussions, individual reports or class discussions, on topics or problems such as:

The need for a good breakfast.

The lack of nutrients in tea and coffee.

Alcohol as a poor source of food nutrients.

Food fads now in vogue, their nutritive values and costs.

Examples of a good breakfast.

Big appetites of teen-agers.

Good things about the school lunch or lunchroom.

Food displays showing:

Foods containing vitamin C.

Green and yellow vegetables.

Milk and milk products.

Body building foods.

Energy foods.

Sweets, soft drinks and their relationship to dental defects.

3. Discuss food deficiencies in the State as shown by diet surveys.

4. Lunchroom activities:

Washing hands (it still may need to be stressed).

Practicing the social graces.

Carrying on pleasant conversation.

Eating with enjoyment and friendliness.

Eating leisurely.

Cleaning up after a meal.

Studying the lunchroom program.

Approximate the cost of the meal if purchased at a public restaurant. Under guidance of the lunchroom manager visit the kitchen and storage room to observe sanitary practices.

5. A committee or group may write a skit to be presented to the class on topics such as: "What advantages boys and girls have who eat breakfast."
7. Conduct animal feeding experiments to show the effects of foods.
8. List some foods which are enriched or fortified. Discuss the enrichment process. (The film "Making a Good Food Better" may be helpful.)
9. Assist in working out ways for every student to have lunch.
10. Pupils may assist in collecting reliable materials for class use.
11. Discuss reasons why the school should not have a coke bar or candy store.
12. Class committees may bring new and different foods to the class to explain:
 - Geographical region where the food is grown.
 - The nutritive values.
 - Some ways it may be served.
 - The extent to which it is used.
13. Make charts of a few foods showing comparison of the nutrients.

Evaluation.

1. Have students participated in planning the nutrition program?
2. What improvements have been made in their diets?
3. What new foods have they eaten this year?
4. Do students seem to be well and happy?
5. Do students seem to enjoy eating wholesome foods?
6. Do students know how to select foods for a balanced diet?
7. Do students eat at least three meals a day?
8. Do students drink an adequate amount of milk daily?

9. Do students seem to be willing to eat the foods that are necessary for good health?
10. Are individual students able to determine progress being made in changing eating practices?

GRADE 9

Desirable Outcomes in Terms of Knowledge, Attitudes, and Practices.

1. Knows that a balanced diet means an adequate amount of the food nutrients needed by the body.
2. Knows how to calculate roughly the amount of nutrients consumed.
3. Knows which foods supply greatest amount of nutrients.
4. Is willing to choose foods on the basis of scientific knowledge.
5. Understands that refrigeration, preservation and proper storage are necessary to insure a safe and adequate food supply.
6. Understands that the methods of cooking make a difference in the conservation of nutrients in foods.
7. Knows that every family should practice food conservation.
8. Knows that the lack of the proper amounts of certain nutrients may cause diseases most of which, at the present time in North Carolina, are subclinical.
9. Recognizes some of the signs of good nutrition.
10. Knows that many factors influence the food habits of the family.
11. Enjoys eating in a pleasant situation.
12. Understands that certain items such as tea and coffee do not contain nutrients.
13. Understands the effect of tea and coffee on body functions.
14. Knows where to get scientific information concerning foods.
15. Appreciates legal controls that protect the citizens against food contamination, etc.
16. Examines critically the advertising statements concerning food nutrients and their relation to health.
17. Evaluates his personal food habits with a desire to change them if needed.

General Approach.

1. *First*, determine the status of the students' knowledge, understandings and practices regarding food and eating habits. *Next*, plan *with the students* and with other 9th grade teachers a program to meet the needs as determined.
2. Continue to emphasize reasons why food makes the difference in growth and health, and help pupils get a clear understanding of what these differences are.
3. Since high school girls and boys want to be physically attractive, interest may be stimulated in a discussion of the relationship between adequate amounts of nutritious foods and an attractive well developed body.
4. Special problems of the 9th grade pupils concerning food practices which need to be considered:

Acne and its relationship to diet, if any.

Dental defects which may be influenced by foods of high sugar content.

Overweight and underweight.

The snack-bar, so popular because of social reasons. (Too many students eat an over-supply of foods of limited nutritive value and fail to get enough wholesome foods.)

Some high school pupils, particularly girls, think it is smart to go without breakfast.

Suggested Experiences and Activities.

1. In planning, on the basis of needs determined in the pre-testing, the class may be divided into committees or groups. Each group may choose one phase of the problem for study and research which may include:

A food, food group, or nutrient lacking in the diet of members of the class.

Foods high in vitamin C. A display or a poster may help interpret the findings. The same may be done with green leafy vegetables, calcium content foods, protein foods.

A survey of daily milk consumption of 9th grade students. Share information with others through bulletin board displays, newspaper articles, radio talks, assembly programs, etc.

Interview with the lunchroom manager to find out about standards maintained in:

- Planning meals.
- Using commodities.
- Buying food.
- Storing food.
- Preparing food.
- Serving food.
- Maintaining health standards of the workers.

Home canning (some of the girls in the home economics class may report to the class on this item).

In a study of food fads, determine nutritive values and cost. Compare with cost of nutrients found in common foods.

"Food is a weapon of defense." Explain the meaning of this slogan.

Foods usually "nibbled" at home, in a friend's house, up town or at a ball game. Estimate nutritive value and cost of them and show findings on charts, or by cartoon drawings.

2. Each student may keep a food record of all food eaten for: one day, three successive days, and during one weekend. Evaluate this diet to determine any need for change. Use a table to work out nutritive values of the food eaten. Help students plan some ways of making needed improvements.
3. Plan panel discussions on:
 - Eating practices of high school students.
 - Nutrition requirements of athletes.
 - Reasons why students "hang out" at:
 - The corner drug.
 - The drive-in.
 - The hamburger stand.
 - Food and its relation to good looks.
 - The meaning of *Grade A* in a restaurant.
4. Make a study of the pure food and drug laws.
5. Carry on animal experiments to determine the influence of various nutrients on growth. (See end of unit for references on how to carry on these experiments.)
6. Keep a record of the food cost for a week for the family, and for himself.

7. Discuss the importance of breakfast in the daily diet, the fallacy of leaving it off, and what may happen when omitted.

Evaluation.

1. What improvements has each pupil made in food practices according to his own evaluation?
2. Do pupils' lunchroom food habits show improvement?
3. In a class discussion on "What this unit has meant to me," were there evidences of growth in knowledge and understanding?
4. Did the written unsigned evaluations of this unit indicate satisfactory progress?
5. As determined by written test, have pupils gained knowledge?

GRADES 10-12

Desirable Outcomes in Terms of Knowledge, Attitudes and Practices.

1. Knows that good nutrition contributes to good health.
2. Knows how to calculate his own food intake, how to evaluate it, and how to improve it if needed.
3. Puts "sweets" in their proper place in the diet.
4. Understands that consumer education is necessary for intelligent buying.
5. Knows why certain methods of cooking are preferable.
6. Knows that man depends on the soil for food.
7. Knows the contributions of public and private agencies to nutrition education.
8. Recognizes some things which influence his own eating habits.
9. Understands that the United States may need to help other countries work out their food problems.
10. Understands that food conservation is necessary to avoid needless waste and expenditure.

Where there is no special course in health education in grades 10-12, food in relation to health may be considered in many subject areas including the ones listed below. All teachers teaching any phase of health should plan the health program together. Listed are a few topics which may be used for class discussion, committee research, or experiments in the respective subject areas.

BIOLOGY.

1. How the body uses food.
2. The effect of bacteria on food.
3. Animal experiments.
4. Vitamins.
5. Pasteurization of milk.
6. Germination of seeds.
7. Absorption and excretion.
8. Function of water in nutrition.
9. Testing drinking water.

CHEMISTRY.

1. Testing for butter fat, starch, protein, and vitamin C.
2. Chemical processes which change food for absorption.
3. Composition of foods.

HOME ECONOMICS.

1. See "A Guide to the Teaching of Homemaking in North Carolina Schools, 1949."
2. Weight reduction.
3. Animal experiments.

PHYSICAL EDUCATION.

1. Adequate food needs for participation in sports and games.
2. Eating practices before a game.
3. The athletic training diet.
4. Diets of individuals who do not participate in physical education activities.

AGRICULTURE.

1. Animal nutrition.
2. Soil conservation.
3. Food production.
4. Food laws.
5. Food preservation and distribution related to the lunchroom.

GUIDANCE ACTIVITIES.

1. The guidance counselor may assist the teacher in helping pupils who have nutrition problems. Assistance of the public health nurse, lunchroom supervisor, home economics teacher or the family physician may be needed.
2. Proper food as one of the essentials for doing a job well.
3. Food in relation to health and happiness.
4. The possible effect of good food on appearance.

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4. *How To Conduct A Rat Feeding Experiment*. Wheat Flour Institute, 309 West Jackson Blvd., Chicago, Ill.

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 - Greensboro - High Point. 105 Piedmont Building, Greensboro, N. C.
 - Winston-Salem-Lexington. 106 N. Cherry St., Winston-Salem, N. C.
6. Metropolitan Life Insurance Company, New York, N. Y.
7. Nutrition Foundation, Inc., Chrysler Building, New York, N. Y.
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DENTAL HEALTH

From the point of view of the number of defects, dental health is certainly of first importance in planning for the health instruction program.

On the assumption that teachers have background information on dental health, very little is included here. General information on dental health (and oral hygiene) may be obtained from health textbooks, from the Oral Hygiene Division of the State Board of Health, from local dentists, and from the American Dental Association.

There are some points which need special emphasis and some recent findings and developments which are of great significance. Some of these are discussed below.

The teacher should not casually accept the fact that about 85 percent of the children in her classroom have dental caries as inevitable and something to be expected. It is incongruous that the physical defect which, in most cases, is preventable by relatively simple measures should be the most prevalent. Preven-

Study of milk followed a survey which showed low milk consumption in the community



tion is *largely up to the individual*. Therefore, teachers can render a great service to children by helping them assume personal responsibility for their own dental health—the earlier in their lives the better.

Two preventive measures being urged by dental authorities, in the light of recent research and experiments, are:

1. Reduction in the consumption of carbohydrates, particularly refined sugars.
2. Brushing the teeth immediately, *within five minutes*, after eating, especially after eating “sweets.” If this is not practical, rinsing the mouth with water will help.

The following explanation of the importance of these practices is from the booklet, *Diet and Dental Health*, published by the American Dental Association:

“The relation of sugar and tooth decay has been well established. Dental scientists have shown that acid-forming bacteria which attack tooth enamel require a food that can be broken down quickly to form acids. Sugars upon the tooth surface can be turned into acids with remarkable rapidity by certain bacteria which are present in the mouth. Each time we eat a sweet, the teeth are attacked by acids which are produced from the sugars by the bacteria in the mouth. . . . Sweets eaten between meals are particularly dangerous, because they stick to the teeth for comparatively long periods of time. They are not brushed off by other foods (vegetables and fruits) as does occur when sugar is eaten at mealtime. To halt decay, cut out sweets. If you must eat a sweet, now and then, brush your teeth immediately.”

The need for a good diet during the time teeth are developing has long been recognized. The diet should contain adequate amounts of milk, fruits, vegetables, proteins, and cod liver oil in winter. Perhaps teachers need to be reminded that this tooth building process is going on over a long period of time, from four months before birth to between twelve and sixteen years of age. While it is true that the enamel and dentine of the tooth require proper nutrition only while the tooth is growing and calcifying within the jaws, the gum and bone tissues around the teeth require nourishment from a well-balanced protective diet at all times. Vitamin C is especially necessary for healthy gums.

Teachers should know also that the fluoridation of public water supplies is considered a matter of proper nutrition and not medication. The adjustment of the fluorine content of the water to one part per million is recommended by the American Dental Association, the American Medical Association, the United States Public Health Service, the American Association of Public Health Dentists, and other scientific bodies. It is believed (based on a great deal of research and experimentation) that this will effect a substantial reduction in dental decay for children who drink fluoridated water from birth through their first eight years, that the benefits will be lasting, and that there are no harmful effects on other parts of the body.

Information on fluoridation as well as on other phases of dental health may be secured from the Division of Oral Hygiene of the State Board of Health, the local dentists, the American Dental Association, and the American Public Health Association.

These preventive steps offer great promise, but they cannot take the place of regular visits to the dentist for the early detection and correction of defects. This is still a very important and effective dental health practice.

Like other health subjects, dental health can be taught in many ways. A positive approach is very desirable, and the learning experiences should be pleasant. To quote Fields and Edgerton,¹ "Living healthfully should never be a bitter pill to any student."

In answer to the questions of *when* and *how* to teach health, Fields and Edgerton say, "Anytime, for incidental teaching; whenever health fits naturally in an activity-unit based upon living experiences, or in a unit on science or social studies in integrated teaching; a long period once or twice a week for problem solving; and fifteen to twenty minutes each day for the subject-centered type of school program."

Some suggested experiences which might be used to motivate dental health instruction are:

Visit of a school dentist.

Dental inspection by teacher or nurse.

Six year molar round-up.

¹Fields and Edgerton. *Teacher's Guide for Health Education*, Remsen Press, 1949. New York.

Little Jack puppet show.

Films.

Everyday experiences of children.

Newspaper and magazine articles pertaining to dental health (for upper grades).

Health information tests.

Arranged environment: posters or charts on bulletin board, new books on library table, exhibits, etc.

Teachers are urged to become familiar with health books in order to make the best use of materials and to be ready when impromptu situations arise. Some specific examples of stories appropriate to certain experiences are given in the outline. These are only examples and are by no means comprehensive.

Visit the dentist at least once a year



GRADES 1-3

Desired Outcomes in Terms
of Attitudes, Knowledge
and Practices*General:*

- Has interest in and curiosity about his teeth.
- Wants to have good teeth.
- Is acquiring good dental health habits.

Suggested Experiences
and Activities*General:*

- Reading and research.
- Discussions.
- Making posters and booklets.
- Getting up programs.
- Arranging exhibits.
- Dramatizations.
- Giving puppet shows.
- Seeing films.

References and
Materials*General:*

- Scott-Foresman and Co., Curriculum Foundation Series.
Three Friends
Five In The Family
- Ginn & Co., Safe & Healthy Living Series.
Spic And Span
The Health Parade
Growing Big And Strong
- The MacMillan Co., New Health and Growth Series.
All Through The Day
Through The Year
Health Secrets
- Readers: In primary grades many of the stories are appropriate.
- Dental Health Material from: Division of Oral Hygiene, N. C. State Board of Health, Raleigh (free) and from American Dental Ass'n., 212 Superior St., Chicago 11, Ill. (write for catalog and prices).
- Films: Film Service, N. C. State Board of Health.

*Specific**Specific*

- Knows that teeth are an important part of his body and that he needs them for appearance, for chewing his food, and for speaking.
- Children look at their teeth in classroom mirror.
- Look for pictures of babies and older children with pretty teeth.

- "A Tooth Show," *Growing Big And Strong*, pp. 89-106.

Specific:

- Knows that a child has twenty baby teeth.
- Knows that the teeth he cut when he was about six years of age are six-year molars and that they are permanent ("grown-up") teeth. Knows whether or not he has his six-year molars, how to locate them, and that they are very important teeth.
- Knows that he will lose his baby teeth, that permanent teeth are growing under baby teeth and that baby teeth will help guide them in.
- Takes care of baby teeth so they can do their job. When baby tooth is loose, knows that "pulling" it will hurt very little.
- Is intrigued with the idea that foods his baby teeth chew help make his permanent teeth.
- Knows that milk, fruits, vegetables, and cod liver oil in winter, will help him have good teeth.
- Selects good lunches or eats lunch served at school.
- Knows that his second teeth are larger than his first and that there are more of them, that chewing helps jaws ex-

Specific:

- Compare with number of fingers and toes.
- Serve apples in room and let children discuss biting and chewing.
- Let children try to say certain letters, such as, "d" and "s" without using teeth.
- Use child's report of a new six-year molar and also a report of losing a tooth for "planned", incidental teaching.
- Show children pictures showing permanent teeth growing under first teeth.
- Study cafeteria menu and point out foods that will help build good teeth.
- Have school party, let children plan, fix, and serve refreshments.
- Have school garden.
- Correlate with units:
Home
Grocery store
Farm
Milk

Specific:

- "A Loose Tooth," *Health Secrets*, pp. 149-150.
- "Vegetable Surprises," *Five In The Family*, pp 73-77.
- "Sue's Book About Foods," *Five In The Family*, pp. 78-80.
- "Food for a Bunny," *Three Friends*, pp. 73-76.
- "The Football Game," *Five In The Family*, pp. 54-56.

Specific:

- expand to make room for them.
- Eats bread crusts, raw apples, and other foods that require chewing.
- Knows that too many sweets are not good for his teeth, that sweets when eaten should be for dessert.
- Enjoys fruit and eats it between meals.
- Knows that biting hard things may break his teeth.
- Guards against accidents for himself and others, especially at drinking fountain.
- Enjoys the "looks and feeling" of clean teeth.
- Knows he should brush his teeth after eating, as soon as possible, and is acquiring this habit.
- Brushes his teeth immediately after meals and before going to bed.
- Has his own tooth brush and knows how to keep it separate, clean and dry.
- Knows how to brush teeth "the way they grow"—lower teeth up, upper teeth down.
- Knows that dentifrice helps get teeth clean, like soap, and that soda and salt make good dentifrice.

Specific:

- Children of other lands, their foods.
- Discussion of pets and foods that are good for them.
- Discussion of dogs chewing on bones, squirrels cracking nuts, etc., to show differences in animals' and children's teeth.
- Demonstration of the proper use of drinking fountain.
- Finding and discussing pictures of children and adults with pretty teeth.
- Let children make individual charts to keep at home and check each day.
- Discuss fact that while we say "immediately after eating", this is not practical for people who eat lunch away from home.
- Find pictures of tooth brushes—ways families keep them.
- Demonstration, child with model of teeth and tooth brush, or with finger on outside of mouth to show motion.
- It is not considered practical to have children bring tooth brushes or keep them at school.

Specific:

- *Nibbles*, Oral Hygiene Division, State Board of Health.
- "How to Use Your Toothbrush," *Five In The Family*, pp. 140.
- "At Sue's House," "At Sam's House," pp. 9-11 and 12-14, *Three Friends*.
- Film: *How and Why of Dental Health* (checking chart).
- "A Funny Tooth Brush," *Three Friends*, pp. 123-127.
- Chart showing technique from A.D.A. (25 cents).
- Posters and other material, "This Is the Way," from Division of Oral Hygiene.

Specific:

- Likes his dentist and knows he is his friend.
- Knows that going to the dentist "in time" prevents or lessens pain and that "in time" means twice a year.
- Likes to have the dentist clean his teeth and takes pride in keeping them clean.
- By the third grade, telephones dentist (with mother's approval) and makes own appointment.
- Understands that if dentist finds small cavity, he will remove the decay and fill it, that if it is not filled the decay will spread, and that if it spreads too far, the tooth will have to be extracted.

Specific:

- Make tooth powder with soda (3 parts) and salt (1 part), flavoring.
- Write letters to parents telling the kind of food they need to build good teeth.
- Visit of school dentist to classroom.
- Have regular visit to the dentist at least once each year, twice if possible.
- Account of visit to dentist by child.
- Build dentist's office in room, dramatize visit to dentist.
- Correlate with social studies about community workers, people who help us, etc.
- Discussion: Why is the dentist our friend?
- Let children watch a small "bad spot" in apple, spread and make comparison with decay in tooth.

Specific:

- Tommy Goes to the Dentist," *Five In The Family*, pp. 136-139.
- *I Know A Secret*, booklet distributed by Division of Oral Hygiene, supply limited but single copies may be secured upon request by teacher.
- "Norma's Story," *Spic and Span*, pp. 99-102.
- "Bobby's Toothache," "At the Dentist's," *Through The Year*, pp. 58-61, pp. 62-63.
- "Little Foxes," *Health Secrets*, pp. 150-152.

GRADES 4-6

Desired Outcomes in Terms of Attitudes, Knowledge and Practices

General:

- Knows that it is "good sense" to take care of teeth, realizes and assumes to a greater extent his personal responsibility.

Suggested Experiences and Activities

General:

- Presentation of dental health films.
- Little Jack puppet show and follow up.
- Keeping class dental health notebook or scrapbook for items

References and Materials

General:

- Lyons and Carnahan, Health Happiness-Success Series
The Girl Next Door You
You And Others
- Ginn and Co., Safe



Pupils have tasting party of fruits

General:

General:

of interest.

- Presenting dental health programs, such as quiz program, radio program, for other grades.
- Dental health column in school paper.
- Health club or committee.
- Let children make dental health bibliography of materials in health books, readers, etc.

General:

and Healthy Living Series

*Safety Every Day
Doing Your Best
For Health
Building Good
Health*

- Material from: Division of Oral Hygiene, N. C. State Board of Health (free on request), American Dental Ass'n., 212 Superior St., Chicago 11, Illinois (write for catalog and prices).
- Films: Film Service, State Board of Health

Specific:

- Knows that new teeth are permanent and should last all his life.
- Knows that by age of 12 or 13 he will have 28 permanent teeth

Specific:

- Let each child make and keep chart of his own teeth showing baby teeth and permanent teeth, and keep it up-to-date as baby teeth are lost

Specific:

- Chart, showing first and second teeth from: Div. of Oral Hygiene, State Board of Health.
- Why Your Teeth Have Different

Specific:

- and that between ages of 16 and 25 will have four permanent molars (wisdom teeth).
- Knows that teeth have different shapes and uses: incisors for cutting, cuspids for tearing, molars for grinding.
 - Knows structure of a tooth.
 - Knows that teeth have a part in the digestive process, that they are "tools of digestion."
 - Knows that teeth are made from materials supplied by food.
 - Knows that diet based on the "basic seven" will help build and maintain good teeth and healthy gums.
 - Eats and enjoys "right foods."
 - Knows that people who eat a great deal of sweet food usually have much tooth decay and vice-versa.
 - Knows why the above is true, that bacteria present in mouth turn sugars into acids which attack tooth enamel and that this happens a few minutes after eating.
 - Exercises self-control in regard to eating sweets.
 - Knows that tooth decay starts on the outside, on the enamel,

Specific:

- and permanent teeth erupt.
- Comparison with animal's teeth and the kinds of food they eat.
 - Draw cross section of tooth.
 - Invite parents to visit room and tell how they help their children have good teeth.
 - Model teeth, using clay.
 - Have program for mothers.
 - Make booklets or charts for mothers containing information and suggestions about good diet.
 - Make posters for cafeteria.
 - Make lists, posters, etc., giving good substitutes for foods containing refined sugar.
 - Have party, plan and serve refreshments that demonstrate good substitutes for foods made of refined sugars.
 - Make poster or write paragraph on theme, "Watch That Sweet Tooth."
 - Display tooth building foods.
 - Ask lunchroom supervisor to provide slices of apple, pear, orange, tangerine,

Specific:

- Shapes, *You*, pp. 158-163.
- "The Parts of a Tooth," *You*, pp. 164-165.
 - "Helping the Body to Make the Best Use of Food," *Doing Your Best For Health*, pp. 54-87.
 - "Helping the Body to Make the Best Use of Food," *Doing Your Best For Health*, pp. 54-87.
 - "The Mothers Go To School," "Food for the Teeth," *The Girl Next Door*, pp. 129-134.
 - *Basic Seven Chart*, American Institute of Baking, 400 E. Ontario St., Chicago 11, Illinois.
 - Chart, "A Decayed

Specific:

and spreads to dentine and pulp unless checked.

- Likes feeling of clean teeth.
- Has habit of brushing teeth before coming to school and before going to bed.
- Knows why it is important to brush teeth immediately after eating and understands that brushing teeth after lunch is just as important as after other meals. It is not insisted upon only because it is impractical when lunch is eaten away from home.
- Knows that ending lunch (or any meal eaten away from home) with raw fruit or vegetable rather than cake or candy would be better for teeth.
- Knows to select a small toothbrush with two rows of widely spaced, mediumly stiff bristles.
- Is careful to keep his toothbrush away from others in clean place where it can dry between brushings.
- Has established habit of going to the dentist regularly.
- Knows that once or twice a year teeth need thorough clean-

Specific:

carrot, etc., for children as they leave lunchroom, or let children take turns preparing them to serve in classroom immediately after lunch—nature's toothbrush.

- Let children bring toothbrush and dentifrice ads to school, discuss true and false claims. Have children write ads.
- Find out as much as possible about history of tooth brushes—kinds of bristles, natural (where from) and artificial.
- Make toothbrush rack for family bathroom.

Specific:

Tooth," Division of Oral Hyg., N. C. State Board of Health.

- Toothbrushing Chart, American Dental Ass'n., 25c.
- "Taking Care of Your Teeth," *The Girl Next Door*, pp. 122-125.
- "Keeping Your Teeth a Lifetime," *You*, pp. 172-174 (pictures on page 173 especially good).
- Encyclopedias.
- "One of Those Things," *You And Others*, pp. 182-183.

- Dental inspections by school dentist.
- Invite school dentist or local dentist to visit classroom and talk to children.

Specific:

- ing by dentist.
- Takes pride in appearance of teeth after dentist has cleaned them.
- Knows that if cavity is discovered early enough it can be filled without pain and without serious damage to tooth.
- Knows that if decay has spread too far tooth will have to be pulled.
- Knows that it is very important not to lose baby teeth too soon or permanent teeth at all.
- Knows that dentist uses X-ray to discover tiny cavities between teeth and abscesses at roots of teeth.
- Knows that irregular teeth can be "straightened" and that dentist who does this is an orthodontist.
- Knows that bad teeth can cause poor health.

Specific:

- Have regular visit to the dentist—at least once each year.
- Let child tell of visit to dentist, describe dentist's office, etc.
- Let children name their dentists.
- Let pupil take a diagram of teeth home. Pupil and parent together inspect pupil's teeth and indicate need for dental care (correction) on diagram.

Specific:

- "I Have Plenty of Teeth Left," *You*, pp. 168-169.
- "The Mystery Club," *The Girl Next Door*, pp. 118-121.

GRADES 7-8

Desired Outcomes in Terms of Attitudes, Knowledge and Practices

General:

- Build on the work of former years and strengthen any weaknesses so that each boy and girl—a. Has the knowledge and understanding of the importance of teeth

Suggested Experiences and Activities

General:

- Dental health may be included as a part of the general health practices.
- Information may be obtained through texts, films, discussion groups, leaflets,

References and Materials

General:

- Some of the references for lower grades may be used in these grades.
- Lyons and Carnahan, *Health-Happiness-Success Series, Health For Young*

General:

- to health and well being. b. Eats the proper food and understands why.
- c. Cleans teeth immediately after eating.
- d. Visits the dentist regularly.
- Keep up-to-date on recent trends and research in dental health.
 - Guidance to individual boys and girls with special dental problems and interests.

General:

visiting consultants, etc.

General:

Americans Working Together for Health

- Scott, Foresman & Co., Health and Personal Development Series
You're Growing Up Into Your Teens
- Laidlaw Brothers Series
For Healthful Living Good Health
For Better Living
- Tharpe, *Your Teeth*, Laidlaw
- Yahraes, *Your Teeth—How To Save Them*. Public Affairs Pamphlet No. 147, Public Affairs Pamphlets, 22 E. 38th St., New York 16, New York,

Specific:

- Knows, understands, appreciates and practices dental health as outlined in grades 1-6.
- Pupils who have special dental problems get help to work out these problems.
- Knows and understands the purpose of fluoride in municipal water supplies.
- Gets an understanding of the use of X-ray in dental health.
- Knows and understands that certain diseases may develop from poor dental hygiene practices.
- Becomes acquainted with special dental health personnel.

Specific:

- Through individual conferences, tests, questionnaires, group discussions, etc., find out the dental health needs of pupils with respect to knowledge and practices.
- With the class, set up a few goals to work toward during the year, such as:
 - a. Visit to the dentist.
 - b. Correction of defects as recommended.
- Groups of pupils may do more extensive study on such topics as:
 - Fluoridation of our city water supply.
 - Topical application of sodium fluoride.
 - The use of X-ray to

Specific:

- *For Healthful Living*, pp. 127.
- *Into Your Teens*, pp. 243.
- *Your Teeth*, Chapter VI. (See section on "Nutrition," this publication).
- *You're Growing Up*, pp. 184.
- *Into Your Teens*, pp. 242.
- *Your Teeth*, "Proper Diet and Teeth."
- Ask your dentist.
- *For Healthful Living*, pp. 126.
- *Into Your Teens*, pp. 244.
- *Health For Young Am.*, p. 63.
- *Working Together For Health*, pp. 273.
- *For Healthful Living*, p. 127.



Eating the right food to have pretty teeth for a pretty smile

Evaluation.

Evaluation is a very elusive matter. Especially is this true in the field of health. "No learning is accomplished until put into practice," is a statement accepted, but tact and common sense should govern methods used to find out if it is being "put into practice." No child should ever be embarrassed over home conditions or at not being able to carry out good health practices. Most forms of "checking" could cause embarrassment to some child.

It is recommended that teacher observation be used for evaluation of the extent to which proper health habits are being practiced. Some of the things which might be done to evaluate the practices are:

1. Observation of conditions of the mouth and teeth by casual glances or by looking into the mouth.
2. Keeping records of dental visits.

3. Encouraging oral accounts about dental visits, brushing teeth, etc.
4. Observation of dietary habits in lunchroom and elsewhere.
5. Conferences with parents, public health nurses.

Individual conferences with children will be a means of determining attitudes and practices. Of course health information tests can be used for evaluating knowledge. Pupils can be urged to evaluate their individual practices as to:

Brushing teeth.

Eating proper foods (avoiding *too many* sweets).

Visiting the dentist.

GRADE 9

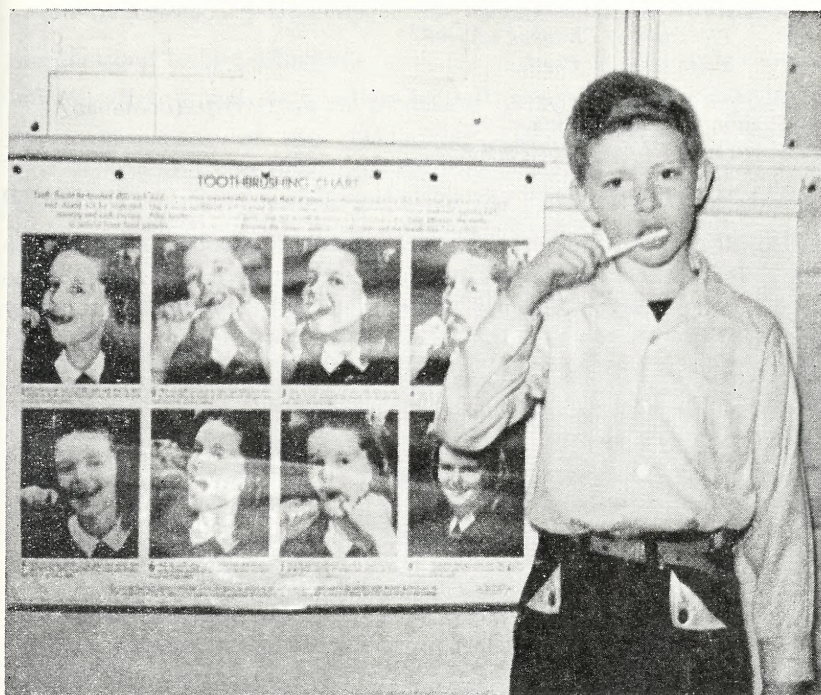
For suggestions which may be used to help with the plans for any dental health instruction for the 9th grade, first review those listed for grades below 9, especially grades 7-8.

Probably the emphasis in the 9th grade should be on the following:

1. The large number of dental caries in teeth of high school students discovered in recent surveys points up the need for special effort to help the high school student:
 - To accept responsibility for his own dental health.
 - To get dental services where there is need for financial aid.
2. Individual problems—many pupils may need encouragement to have dental defects and poor practices corrected.
3. Study of the recent research about teeth and dental health, such as diet and fluoridation.
4. Dental health should be coordinated with other health practices. There should be no need for a unit in dental health at the 9th grade level.
5. Study the diseases of the gums, such as gingivitis, pyorrhea, and trench mouth.

References.

1. Some of those listed for grades 7-8.
2. Goldberger and Hallock. *Health and Physical Fitness*, Ginn and Company, New York, 1946.
3. Current periodicals.



Demonstration of teeth brushing

GRADES 10-12

Each pupil should have acquired adequate knowledge about the teeth and their care; should have established good oral hygiene practices; and should have had any defects corrected as soon as they were discovered. However, in individual cases where this has not been attained, the pupil should have the help of his teacher to improve his own condition.

In addition, in high school courses concerned with the study of Child Care and Growth, the care of the child's teeth would be one of the phases of that study. Some information on this may be found in the references listed for the primary grades. Other information may be found in the professional references for the teacher and the references listed below. Home economics, biology, physical education, civics, agriculture, and others offer opportunities for teaching dental health.

Children's Bureau Publications, Government Printing Office, Washington, D. C.

Your Child From One to Six—pp. 110-111.

Your Child From Six to Twelve—pp. 108-109, 115-116.

American Dental Association, 222 Superior Street, Chicago 11, Ill.
The Care of Children's Teeth.
Your Child's Teeth.

Division of Oral Hygiene, North Carolina State Board of Health, Raleigh, North Carolina.
Mouth Health Catechism.

Evaluation.

Do all students have an understanding of good dental care to the extent that they are taking care of their own dental problems and are willing to assume some responsibility for community action?

REST, WORK, RELAXATION AND RECREATION

Suggestions to the Teacher.

A functional program of healthful living depends in part on the organization of the child's day. If acquisition of health knowledge, and the provision for health examination and services are to be of greatest value to the child, then opportunity should be provided for him to practice good health habits and to live healthfully.

An important element in healthful living is provision for a balanced program of rest, work, relaxation and recreation.

1. The work in the primary grades may be informal and organized around activities which make application of principles set forth in the objectives for "Rest, Work, Relaxation and Recreation." In this way health practices with reference to rest, work and recreation may become an integral part of the entire school program.

The units of work may be organized with social studies, science, reading or with some other subject. The beginning should be on the level of the pupil's ability, needs, and interest and proceed toward the improvement of conditions and practices.

2. In organizing the daily school program, care should be taken to provide for a proper balance with reference to class work, recreation, rest, lunch hour, supervised play and recess periods. Definite policies should be established for:

Recreation periods.

Recess periods.

Appropriate activities.

Length of lunch hour to avoid hurry.

Supervised rest periods.

Free rest periods.

In the primary grades the noon meal may be followed by a rest period during which the pupils are given training in relaxation under hygienic conditions.

The supervised physical education program provides activities during the school day which serve as a prevention of fatigue and a method of relaxation from more formal types of activities as well as a period for teaching skills.

3. Work periods should vary in length depending upon the age of the pupils, the character of the class activity, and the

emotional stability of the teacher and the class. For a six-year old engaged in close intensive work, a ten to fifteen-minute period should be the maximum. If the work is less concentrated, a longer period is possible without excessive fatigue or nervous strain. The length of the intensive work periods may be increased a few minutes in each grade for average children. Avoid strain by permitting children freedom to move about.

4. Sequence in which classes are arranged in the daily program is not particularly important. A sound policy in the arrangement of school work is to provide variety of activity to relieve physical and mental tension and fatigue. It is reasonable to believe that a rich and varied day's program will not cause undue strain or physical fatigue. (See section on "Healthful School Living.")
5. Home study may be desirable under certain conditions. It should be limited to pupils in the upper elementary grades and high school and be carefully planned by pupil and teacher. It should require only a small part of the child's time out of school and is defensible only if it enables the student to develop self-direction and responsibility for working independently.



Learning how to have a rich and varied day's program



Children eat leisurely

In assigning home work, the teacher should consider the out-of-school activities and needs and interests of children. For example, doing chores at home, participating in family activities, two hours per day needed for play, preferably out of doors, ten to twelve hours needed for sleep, taking lessons and practicing music, dancing or art, attending 4-H club and scout meetings, earning spending money, taking care of personal matters, such as hair, skin, and clothing.

7. Care should be taken not to overload a pupil's daily schedule with make-up work assignments when he returns to school after an absence due to illness. The pupil's impaired health condition should be recognized and ample time should be allowed for make-up work. A pupil should not be deprived of his free play or physical education period to make up work.
8. Time should be allowed for proper toilet habits, including adequate time for hand washing after toilet use and before meals.
9. Adequate time should be allowed for lunch. The lunch hour should be a regular period in the daily program. Enough time should be provided to allow children to eat leisurely. Soft music carefully selected may induce pupils to eat more slowly.
10. Individual differences of children, including the mentally and physically handicapped and the superior, may necessitate modified or limited activities, additional rest, or more activity.

Since children are constantly encountering many emotional, physical or mental strains, it is important that their needs be studied carefully.

11. The pupil's attitude and his ability to relax may be greatly conditioned by the atmosphere of the classroom. It may be well for the teacher to check his manner and voice to see the effect they have on the pupils. Pupils are usually relaxed and free from strain when the teacher has a quiet manner and voice. On the other hand, strain and restlessness may be observed because of the teacher's harsh voice or irritated manner.
12. The examination or test period should vary with the pupil's age and the character of the examination. Care should be taken to see that the importance attached to a single examination will not be so great that it is likely to cause emotional strain and physical disturbance, particularly among those pupils who should be protected from such conditions.

General Objectives.

1. To make rest and relaxation a point for definite emphasis in all grades.
2. To enable pupils to understand the importance of sleep and rest in securing and maintaining optimum health and efficiency.
3. To plan a daily schedule which will provide for a balanced program of rest, recreation, and work, including adequate time for rest.
4. To supervise pupils' activities to avoid undue fatigue.
5. To help pupils in acquiring the habit of relaxing at definite times during the day, such as before and after meals and before bed time.
6. To plan and direct a physical education program which encourages pupils to participate regularly when in good health in such activities as will promote optimum development of organic and muscular vigor and growth.
7. To help pupils to understand and appreciate the importance of exercise and play in one's daily life.
8. To guide pupils so that they will avoid habitual sacrifice of sleep for movies, radio programs, television, and other ac-



Has regular sleeping hours

tivities which may interfere with the rest they need and thereby result in mental and physical strain.

9. To provide those forms of recreation that will help prevent and perhaps eliminate fatigue and weariness due to inactivity.
10. To help pupils learn the health values of work and to help them develop good work habits.

GRADES 1-3

Specific Objectives.

1. Knowledge and Understandings.
 - a. Understands that sleep is necessary for keeping well and happy.
 - b. Knows that from eleven to twelve hours of sleep are necessary for primary age pupils.
 - c. Knows the value of regular bedtime habits.
 - d. Knows what to do in getting ready for a good night's rest, such as taking a bath, brushing teeth, changing clothes to proper sleeping garments, going to toilet, darkening the room, ventilating room when necessary.
 - e. Realizes the need for rest and relaxation during the day.
 - f. Knows good work habits.
2. Attitudes and Appreciations.
 - a. Usually goes to bed willingly.

- b. Enjoys sleeping in a cool, dark, and well ventilated room.
 - c. Enjoys getting exercise through useful work as well as play.
 - d. Likes to cooperate in opportunities provided for relaxation and rest periods during school.
 - e. Enjoys doing chores at home and at school.
 - f. Likes to play.
3. Habits and Skills.
- a. Relaxes and rests when tired.
 - b. Is generally relaxed when engaged in school or out-of-school activities.
 - c. Gets the proper amount of sleep.
 - d. Has regular sleeping hours.
 - e. Goes to bed clean and sleeps in a dark and well-ventilated room.
 - f. Plays outdoors in the sunshine.
 - g. Performs work duties, with pleasure most of the time.
 - h. Is independent in getting ready for bed, going to sleep, and in getting up.

Suggested Experiences and Activities.

1. Demonstrations may be given to show pupils:
 - a. Correet posture when resting. (See section on "Posture.")
 - b. Ways to relax, such as playing like a soft rag doll to make body limp or imitating the way a relaxed cat sleeps.
2. Using rhythm games, soft music, singing, or reading for relaxation during rest periods.
3. Permit pupils to play dolls and to use their knowledge of how to get ready for bed properly, to develop an appreciation of the need of sleep, proper time for going to bed and for getting up in the morning. Pupils may be taught bedtime stories to tell to dolls and lullabies to sing.
4. Through cooperation of parents mats or rugs may be procured to provide more complete relaxation when sleeping and resting at school, especially for first grade pupils after the lunch hour.
5. Plan the daily program to provide for indoor or outdoor games or both under the supervision of the teacher. (See *Physical Education* bulletin.)

6. Children who have been ill, or when physician recommends rest, should be permitted to rest during the play and physical education period, instead of engaging in activities requiring exercise.
7. Teachers and pupils should plan together the daily schedule to provide for a proper balance of play, work, rest, relaxation and exercise. Periods of concentration and consumption of energy especially should be followed by periods of rest and relaxation.
8. Pupils may be taught to read the room thermometer. Responsibility may be delegated to certain children for keeping the classroom properly ventilated.
9. Pupils may learn to tell the time through use of clock face. They can make their own clock face and can mark on it hours for sleep.
10. Pupils may be stimulated to do creative recreation work through different media to illustrate what they are learning about rest, relaxation and work. For example, they may draw, paint or cut and paste pictures that suggest ways to relax and sleep. They may write stories and letters (to

Rugs provide more complete relaxation when sleeping or resting at school



parents) giving reasons for eleven to twelve hours of sleeping regularly each night.

11. Pupils may make sleep and rest schedules to aid them in following a regular schedule.
12. Pupils may learn to rest their eyes when they are tired by closing them and relaxing for a few moments, or by simply covering the eyes with the hands often during the day.
13. Pupils may observe a kitten or puppy at sleep.
14. Children may tell about the kind of work they do at home. Write or draw these experience stories.

Evaluation.

1. Teacher observes children for any signs of fatigue.
2. Children may tell what time they usually go to bed.
3. Program of activities should be reviewed often to see if it fits needs of pupils.
4. Compare outcomes with objectives to determine accomplishments.

GRADES 4-6

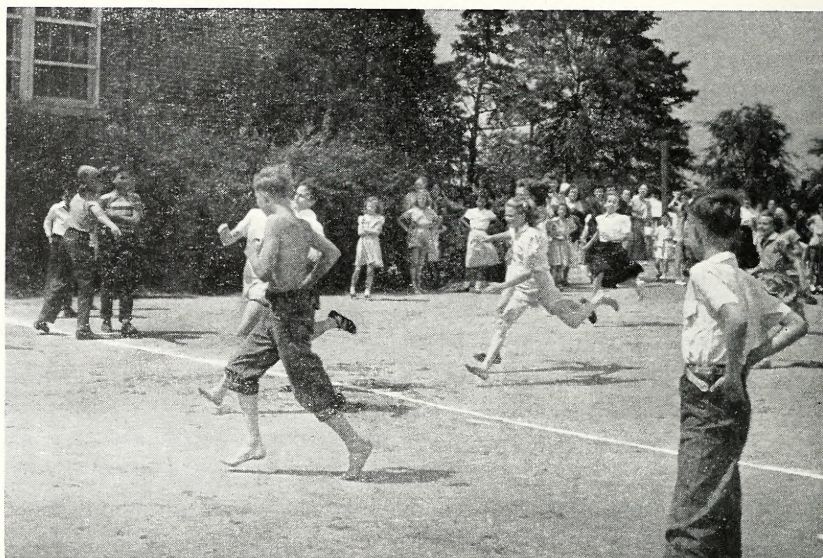
Specific Objectives.

1. Knowledge and Understandings.
 - a. Understands that rest and sleep help maintain and improve health.
 - b. Knows that ten to eleven hours of sleep are needed each night.
 - c. Realizes the importance of getting ready for bed properly, such as having the body clean, mind free of excitement and proper clothing and ventilation, going to toilet and sleeping in a dark room.
 - d. Realizes need for resting the eyes when tired.
 - e. Understands that some kinds of work are good exercises.
 - f. Realizes that sleep is important for best functioning of the mind.
 - g. Realizes that to sleep well at night it is necessary for the body and extremities to be warm.
 - h. Knows that the body should be relaxed when working and playing.

- i. Realizes that a good night's sleep will relieve normal fatigue caused by work or other exercise.
 - j. Understands the relation of skilled muscular activities to relaxation.
 - k. Recognizes rhythm as an aid in relaxing muscles.
 - l. Begins to learn the good feeling that comes from doing a job well.
2. Attitudes and Appreciations.
- a. Makes an effort to relax when conscious of tenseness or fatigue in some activity.
 - b. Appreciates a systematic schedule which includes the proper amount of sleep each night.
 - c. Enjoys periods of rest and sleep.
 - d. Appreciates the need for rest when tired.
 - e. Develops an attitude of cooperation in resting when tired and in going to bed at the proper hour.
 - f. Recognizes rest as an aid in good health.
 - g. Enjoys playing games appropriate for this age group.
3. Habits and skills.
- a. Usually follows a regular bedtime schedule.
 - b. Sleeps in properly ventilated rooms.



Plays in the open air and sunshine



Plays in the open air and sunshine

- c. Prepares himself properly for going to bed.
- d. Rests in the daytime when tired.
- e. Plays in the open air and sunshine.
- f. Is generally relaxed when working and playing.
- g. Plans ahead for work, play, and rest.

Suggested Experiences and Activities.

1. Make a collection of books and bulletins providing scientific information for pupils.
2. Supervise class discussions to aid pupils in clarifying and fixing important facts and knowledge pertaining to rest, recreation and good habits of sleep, relaxation and exercise.
3. Use filmstrips, films and pictures to aid pupils in a better understanding and appreciation of good ways to relax, rest, sleep and exercise.
4. Have demonstrations to show effect of tenseness and strained muscles when trying to dance, write or rest.
5. Have demonstrations to show how to relax as a rag doll.
6. Demonstrate good sitting positions for relaxation.
7. Work out a program of activities to suit child's needs. Teacher should take into consideration the children's activities

out of school. If they are very active out of school, they should have fewer activities of a strenuous nature while in school to avoid tension and fatigue. These pupils might be assigned some responsibilities of leadership during rest periods and during performances requiring extra activity.

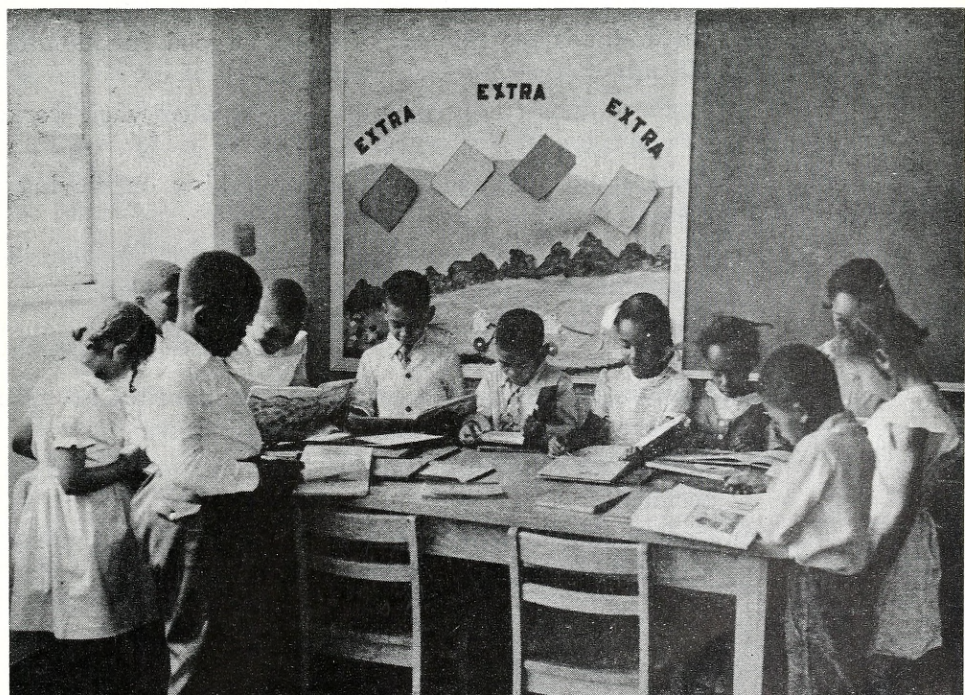
8. Health may be integrated with subjects like English, arithmetic and the social studies. In the English period the pupils may write letters to parents explaining their plan for having a regular schedule for sleeping and reasons for proper hours of sleep and rest periods during the day. Discuss these in class.

In arithmetic they may make up problems with reference to amount of sleep needed. This will provide a functional use of denominate numbers in working with hours and minutes, and give them a keener sense of the importance of sleep.

In the social studies they may observe, study and discuss the rest and sleep habits of animals, such as their pet dog and cat.

9. Find out what sleep and rest habits athletes need to develop.
10. Help physically handicapped children adjust their program according to their needs.

Books and bulletins provide scientific information



Evaluation.

1. Teachers should constantly evaluate the emphasis placed on certain school activities, so as to avoid tensions. *This is most important.*
2. Children may help teacher evaluate.
3. Measure accomplishments with respect to objectives.

GRADES 7-8**Specific Objectives.**

1. Knowledge and Understandings.
 - a. Realizes the relation of rest and sleep to the nervous system.
 - b. Understands that the body repairs nerves and nerve cells during sleep and rest.
 - c. Understands the harmful effects of too frequent attendance at motion pictures, such as nervousness and eye strain and interference with rest.
 - d. Knows that fatigue or tension caused by long periods of work or study can be lessened by frequent rest periods.
 - e. Knows that the heart has less work to do while resting, therefore there should be frequent rest periods.
 - f. Understands the relation of sleep to good functioning of the mind.
 - g. Realizes that it is important to be relaxed when working or playing.
 - h. Understands that tension while working or playing increases fatigue.
 - i. Knows that physical work is exercise and is helpful in improving his strength and physical condition.
 - j. Knows that normal fatigue may be removed by sleep and rest.
 - k. Recognizes relation of fatigue of one part of the body, such as the eyes or feet, to the whole body system.
 - l. Recognizes relation of fatigue to traffic, home, and other accidents.
 - m. Understands the effect of muscular and nerve fatigue upon accuracy, efficiency, and speed in either play or work.

- n. Begins to recognize the relation of stimulants to sleep and their harmful effects.
- o. Knows that for optimum health seventh and eighth grade pupils should usually have about ten hours of sleep.

2. Attitudes and Appreciations.

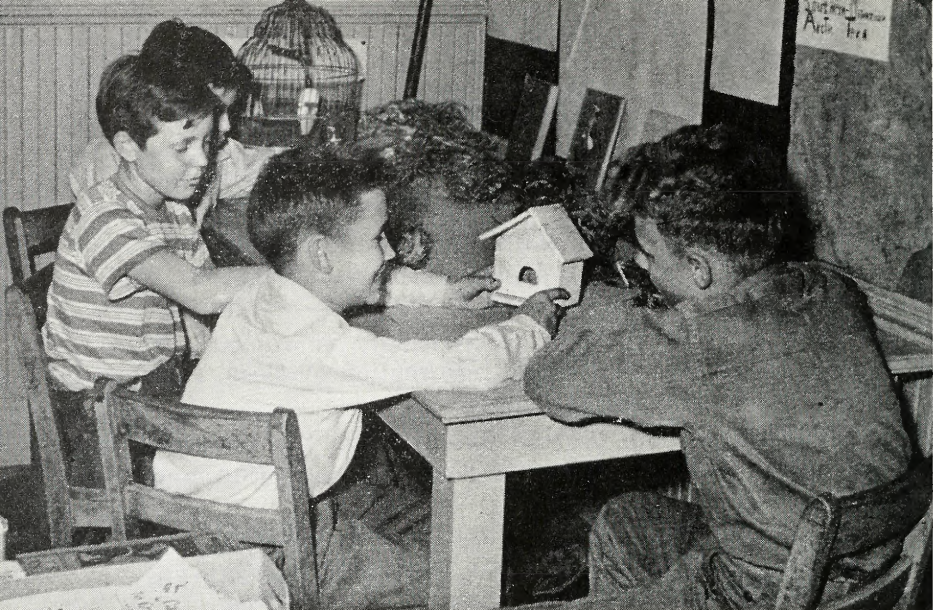
- a. Shows an interest in acquiring information on sleep, rest, fatigue, work, and recreation.
- b. Attempts to put into practice those things that are important for his sleep, rest, relaxation, recreation and exercise.
- c. Takes pride in keeping himself physically fit and foregoes certain pleasures which he knows will interfere with his rest.
- d. Takes pride in doing chores.

3. Habits and Skills.

- a. Has regular bedtime habits and gets proper amount of sleep for his needs.
- b. Usually relaxes when playing, talking, reading, and the like.
- c. Listens and participates in activities with reasonable patience and without tensions.
- d. Stops to rest after strenuous activities.
- e. Is careful to avoid eye strain—moves to better light, adjusts shades, etc.
- f. Participates in sports and has hobbies as a form of recreation.
- g. Plans and follows a well-balanced schedule of work, rest and recreational activities.
- h. Participates in work activities.

Suggested Experiences and Activities.

- 1. Reads, studies and discusses textbooks and other printed material which supplies pupils with scientific information concerning the body's need for sleep, rest, recreation and exercise.
- 2. Classwork in which there is an integration of subject matter with health activities helps pupils to recall facts learned, to organize them, and to evaluate the merits of knowledge



Has hobbies as a form of relaxation

gained in relation to their own needs for a regular schedule of rest, work and play properly balanced.

3. Compositions may be written on subjects showing the relation of eye strain, body fatigue, lack of sleep and tenseness to travel accidents, home and school accidents, and inaccuracy in both mental and physical work.
4. Posters may be made to show ways of relaxing and the contrast between a relaxed person and a tense person.
5. Consciously practice relaxing while playing a game or dancing. Let someone try to demonstrate the difference in looks and proficiency of a person when dancing or playing games when relaxed and when tense.
6. Research work may be done to determine efficiency in working:
 - a. Under conditions that are conducive to relaxation.
 - b. Continuously for long periods without rest periods and with brief rest periods.
 - c. After loss of sleep and after adequate sleep and rest.
7. A study may be made of the causes for insomnia and the effect of certain stimulants. Secure aid of the nurse and physician in determining what will aid one to go to sleep quickly.
8. If and when a class manifests a sleepy and drowsy condition, the situation might serve as a starting point for a study of those factors which interfere with rest, sleep and relaxation.

Evaluation.

1. Have each child make a schedule of the things he does each day—entire 24 hours. Help student evaluate his program of activities.
2. Teacher may observe child's activities at school. When given a choice, does he choose an activity to fit his needs; how tired is he at the end of the period?
3. Determine the attitude of child toward work, physical education, recreation, rest, and a leisurely lunch.
4. Does the school schedule—during the day and for out-of-school activities as well—carry out the well-balanced idea?

GRADE 9**Specific Objectives.**

1. Knowledge and Understandings.
 - a. Those suggested for lower grades when they apply to this group.
 - b. Knows that he needs to continue a good balance of activities.
 - c. Knows that he may need to make a definite effort to keep good posture, especially rapidly developing girls and tall thin boys.
 - d. Knows that he may tire easily due to rate of increase of growth.
 - e. Understands that he needs enough sleep every night.
 - f. Knows outdoor exercise is highly desirable every day.
 - g. Understands something of the difference in heart action when awake and when asleep, and knows the value of rest and sleep to breathing and heart action.
 - h. Knows that work is essential to good health as well as to earning a living.
 - i. Understands that the adolescent often needs more rest and sleep than he did in earlier years.
2. Attitudes and Appreciations.
 - a. Wants to develop a balanced program of living—providing time for sleep, rest, recreation and exercise.
3. Habits and Skills.
 - a. Gets 8-10 hours of sleep or enough for his own needs.

- b. Does not participate in too strenuous activities or for too long a period of time.
- c. Takes account of his schedule of living from time to time.
- d. Accepts work as a responsibility and opportunity—enjoys work.
- e. Participates in recreational activities with his family as well as with “the gang.”
- f. Does not get into too many extra-curricular activities or hold office in too many clubs and other organizations.

Suggested Experiences and Activities.

- 1. Have discussions concerning the special needs for rest at this stage of growth.
- 2. Each pupil keep a record of his activities, including sleep, over a period of time (one week). Analyze it. A committee may work up the list of habits to include on these records.
- 3. Where schedules seem to be too strenuous, help pupils try to improve their work habits and their daily routines.
- 4. Discuss the values of work other than as an economic factor.
- 5. Have group or committee make list of ways of relaxing and resting.
- 6. The physical education teacher or a physical therapist may give some advice to the class or to a committee on how to relax. Class may want to make a list of relaxing exercises and try them out.
- 7. Pupil begins to be responsible for seeing that he does not overload himself with extra club or activity work—both in and outside of school.
- 8. Choose a hobby. “Ride it.” Don’t let it ride you. Have a hobby show. (See “Mental Health” section for other suggestions.)
- 9. Make a schedule of work for a week, including school work, home study, home chores, work away from home, etc.
- 10. Physically handicapped pupils should plan with the teacher programs of living to suit their needs.

Evaluation.

- 1. Each pupil should evaluate his own program.
- 2. In a class discussion pupils may evaluate the school day and the after-school day activities program.

3. Teacher observes students for signs of adequate sleep, rest, and relaxation.
4. Pupils may tell how they have improved in their ability to relax and enjoy their work and play.

GRADES 10, 11, 12

Objectives.

The schedule of the school day should be arranged to keep the welfare of the student first. Each student should accept some responsibility for keeping his own schedule of school activities balanced. Teachers can help guide students who have not matured enough to balance their program of living. Teachers of the various subjects may continue to foster the objectives stated for previous years. Each high school class should aid the student to develop appropriate habits of working and relaxing.

Activities.

1. Learns many recreational activities that can be used after he is away from school.
2. Balances his own program of activities to meet his needs.
 - Rest.
 - Recreation.
 - A reasonable number of extra-curricular activities.
 - Work.
3. Students may be encouraged to use some phase of rest, recreation, work and exercise as topics for discussion, English themes, radio talks, newspaper items, panel discussions, etc. They should be in relation to their local problems in these areas.
4. Each student should make an inventory of his rest, exercises and recreation activities. Change his schedule of living, if needed.
5. Discuss such topics as:
 - What a job means to the man who has retired and is still physically fit.
 - Ways to relax.
 - Our school work as our job.
 - Doing a job well gives a feeling of satisfaction.
 - The importance of learning things to do during leisure time.
 - Young children should learn to work—have regular chores or jobs.
 - Growing children should have a regular bed-time.

6. Group work.

Make a survey of recreation possibilities in the school, community, town or county, and use the findings of this report to inform the public.

Make a list of the reasons why people do not get enough rest or sleep. Class may discuss this report and decide how the members can change their own schedule so as to get more rest and sleep.

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EYES, EARS, NOSE, THROAT**Introduction.**

The study of the eyes, ears, nose and throat as it relates to the health of the individual should emphasize the importance of what to do to promote the best use of these organs and how to protect them from hazards and diseases. Only a minimum amount of time should be spent in the elementary grades studying the parts of these organs and learning to spell their names. Using the correct terms every time they are referred to will help the pupil learn those most essential without the unpleasant chore of memorizing before they have real meaning. It is essential that everything possible be done to help each boy or girl have a real appreciation for his body and the parts and functions of each.

GRADES 1-3**Desired Outcomes in Terms of Knowledge, Attitudes and Practices.**

1. Seeks best light when reading or using eyes for other "close work." (See section on "Sanitation.")
2. Uses own towel and washcloth. (See section on "Personal Cleanliness and Grooming.")
3. Seeks the help of an adult when a foreign object gets in eye. (See "First Aid.")
4. Does not rub eyes.
5. Keeps sharp objects away from eyes and ears.
6. Blows nose gently.
7. Wears glasses or hearing aid when prescribed by physician.
8. Keeps away from people who are sick with a communicable disease. (See "Communicable Diseases.")
9. Keeps foreign objects out of ears, eyes, nose and throat.
10. Holds book in proper position for reading (10 to 12 inches from eyes).
11. Helps protect eyes, ears and nose of his playmates.
12. Knows that it may be dangerous to the eyes to throw any kind of small objects at others.
13. Knows that a sore throat may be a sign of a disease and should be reported to parents.

14. Knows how to clean ears properly.
15. Knows that most objects which have not been sterilized may have germs on them and may cause diseases.
16. Understands the dangers of firecrackers.
17. Knows that it is dangerous to put hard objects, especially sharp ones like nails and pins, in the mouth, nose and ears.
18. Understands elementary anatomy and functions of the eyes, ears and nose.

Suggested Activities and Experiences.

1. Test eyes of all children using the Snellen E. Chart. Make a game of the testing with small children and have them tell in which direction the "legs of the table" point. Children may have a big E to practice with for a few days before the test.
2. If an audiometer is available, help prepare children who are to be tested for the experience. Many of them will think it is going to hurt. (Teacher should be tested so that he can explain the signals (tones) children will hear.) Find out from tester what response she expects children to give and let them practice. Most children use "hand up" when they hear the tone and "hand down" as soon as tone stops. When no audiometer is available, the teacher may use a "whisper test" (speaking words very softly) and have child repeat the words. This is usually done at 20 feet away. Teacher may give directions in a very soft voice to see how many know what to do. This is not really a test at all in the true sense, but is a technique to try to find children with defective hearing.
3. Discuss and/or demonstrate:
 - a. How to clean ears.
 - b. How to keep ears warm in winter.
 - c. Ways to protect own ears and those of others against sharp objects, loud noises, and diseases.
 - d. How to use a handkerchief.
 - e. How and when to "clean out" nostrils.
 - f. Ways of protecting the eyes against rubbing, soiled objects, poor light, very bright light, dust and dirt.
 - g. Ways of cleaning and caring for glasses.
 - h. How rest and sleep help the eyes.

4. Have pupils find pictures showing children wearing glasses, washing face, using handkerchief, etc.
5. Help children who wear glasses to accept the wearing of them.

GRADES 4-6

Desired Outcomes in Terms of Knowledge, Attitudes and Practices.

1. Knows simple anatomy of the organs and their functions (ears, eyes, nose and throat).
2. Knows a few ways the eyes, ears, nose and throat protect themselves.
3. Knows ways to protect eyes, ears, nose and throat.
 - a. By using dark glasses (the correct type) when needed.
 - b. By caring for sore eyes (pink eye).
 - c. By guarding against colds (which may infect the ears).
 - d. By protecting eyes by occasional rest.
4. Appreciates the opportunity to enjoy things through sight and sound (color, music, etc.).

Suggested Activities and Experiences.

1. Review health practices suggested for grades 1-3.
2. Plan with students some of the things to learn about the eyes, ears, nose and throat. What do they want to know?
3. Use correct terms—but do not drill on learning how to spell all of these terms. This may be one way children lose interest in health education.
4. Let the children participate in the usual screening tests, including Snellen E test.
5. Encourage children who seem to need help (talk with nurse) to go to their family physician and to do what he says. Let those who have had tonsils out, eyes examined, or ears checked, tell the class about it.
6. Provide opportunity for pupils to study charts, models, filmstrips and films in addition to the textbook pictures of the ear, eye, nose and throat.
7. Develop an appreciation for the eyes, ears, nose and throat and their contributions to enjoyment of life. Talk about ways of getting along without one or more of these—use of



Well lighted classroom is conducive to efficiency and enjoyment of work
a seeing-eye dog, Braille system of reading, hearing aid, lip reading, sign language, etc.

8. Have students observe each other's eyes and the way they adjust to light and darkness (dilation of pupils), or observe their own eyes in a mirror, as the student moves from light to dark and from dark to light.

GRADES 7-8

Desired Outcomes in Terms of Knowledge, Attitudes and Practices.

1. Knows something about the personnel who work with eyes, ears, nose and throat and what type of work each does.

Oculist.	Otolaryngologist.
Opthalmologist.	Optician.
Optometrist.	Audiometric technician.
Otologist.	
2. Uses a light meter (where available) to measure light.
3. Knows how the care of facilities may improve light, such as clean windows, clean light fixtures, properly adjusted shades.
4. Understands the importance of animal feeding experiments to point out the importance of food to eyes.
5. Knows that night blindness is related to a lack of vitamin A.
6. Recognizes signs of eye strain or poor eyesight.

7. Understands that hearing and sight defects may affect posture.
8. Tries to find out how television affects a person's eyes.
9. Tries to understand and learns to appreciate voice changes in boys.
10. Understands some important details of the anatomy and functions of the eyes, ear, nose and throat.
11. Understands the meaning of 20/20 vision.
12. Understands the elementary principles of "*how we hear*" and "*how we see*."

Suggested Activities and Experiences.

1. Committees or groups from the class may interview eye, ear, nose and throat professional personnel for information about their professions.
2. Discuss vocational rehabilitation opportunities for persons with physical handicaps.
3. Discuss or have groups report to class on protection for employees in various industries against injury to eyes, nose, throat and ears.
4. Do research and discuss the question: "Does television hurt your eyes?"
5. Divide the class into teams (two to a team) and have each member of the team give the other the Snellen E test, under supervision of the teacher. Record findings on the "Teacher Screening and Observation Record." Where indicated, follow up these findings.
6. Secure a pair of field glasses, microscope, or some other magnifying glasses. Demonstrate their uses. Discuss the ways they help in seeing.
7. Demonstrate how depth perception is possible with two eyes and not with one. (Stereoscope will help in showing this.)

GRADE 9

Desired Outcomes in Terms of Knowledge, Attitudes and Practices.

1. Understands the functions of the eyes and ears.
2. Knows why he should have an examination of the eyes and ears.

3. Understands that the ability to use the senses of sight and sound can be improved.
4. Knows about color blindness, its causes, handicaps and how to compensate for this condition.
5. Understands the effect on the eyes of reading while riding in a car or other moving vehicle.
6. Understands the importance of the proper care of the eyes, ears, nose and throat.
7. Knows about the artificial eye and its importance to looks and mental health.
8. Knows about a hearing aid.
9. Appreciates the importance of glasses to health and efficiency.
10. Knows about defective eye conditions, such as nearsightedness, farsightedness, and granulated lids.
11. Knows about rehabilitation services in the community.

Suggested Activities and Experiences.

1. If an audiometer is available, a committee from the class may learn to operate it and test the hearing of other members of the class. This should be done under supervision of the teacher.
2. If a light meter is available, arrange to have pupils measure the light on their desks with the shade up, down, with lights off and on, and with desk turned at different angles.
3. Have pupils find out how to help prevent night blindness.
4. Discuss high altitudes and their effect on the ears. Some pupils may relate their experiences and give explanation of what happens.
5. List occupations which require good hearing.
6. List occupations which require intensive use of the eyes.
7. List occupations which permit persons handicapped in vision or hearing to make a living.
8. List occupations which require extensive use of the voice.
9. Discuss the ways hearing and seeing are important to the prevention of accidents.
10. Discuss the use of bathing caps, ear plugs, and nose protectors in swimming.

11. Class committees may use models (torso), charts, films, film-strips, pictures, and other aids to demonstrate and point out to the other class members the anatomy of the eye, ear, nose and throat and their functions.
12. Discuss hearing and vision standards required to enter the armed services.
13. A committee may interview the "driver's license examiner" in the area and report to the class on the kind of test given. The teacher may arrange for entire class to go to the examining center for a discussion of the test and for a demonstration by the examiner.
14. Make a survey of special schools for the deaf, the blind, etc., in the State.
15. Discuss sight saving classes in the public schools.
16. A human skull may be obtained from local physician to study location of sinuses.

GRADES 10-12

There will be opportunity in many subject areas for individual pupils to get information about specific problems. For example, in the biology class students study the eye and the ear, their functions, and relationships to other parts of the body and diseases affecting them. In the guidance program there should be opportunity to study occupations a handicapped person may enter. Students in the physics class may study sound waves, light waves and how the eye makes a picture.

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HEART AND CIRCULATION

Introduction.

Every person wants his body in the best condition possible for looks, efficiency and the fullest enjoyment of work and leisure time activities. No organ of the body is more important in determining the quality and duration of life than the heart.

The efficiency of the heart and blood is affected by:

1. Heredity.
2. Emotional tensions.
3. Certain diseases, either directly or indirectly. For example: rheumatic fever, anemia, chronic infection of teeth, etc.
4. Health practices, such as sleep, rest, relaxation, recreation, cleanliness, exercise, and good eating habits.
5. Care of the body during illness and following accidents.

The School's Responsibility:

The school has the responsibility for providing boys and girls now in school, who are the parents of tomorrow, with the opportunity to learn the importance of medical examinations for pre-school age children.

In preparing the beginner to enter school, it is recommended and urged that he get a medical examination before entering. In fact, the examination of the beginner is given first priority on the suggested schedule of medical examinations for school children. Whether this examination be given by the family physician, at the school clinic, or at the health department, it is important to include an examination of the heart to detect any signs of defects, including rheumatic heart disease.

Any defects discovered should be reported to parents and to the first grade teacher.

The school should provide opportunities for the pupil:

1. To get scientific information about the heart and circulatory system, including their functions.
2. To learn about health habits which will contribute to the efficiency of the heart and circulatory system.
3. To learn things that prevent and control diseases which may affect the heart and blood adversely.
4. To learn the community resources for services in preventing, caring for, or treating heart "trouble."

5. To learn about diseases that may affect the heart and circulatory system.
6. Who has a heart defect to adjust activities in accordance with the recommendations of the family physician.

GRADES 1-3

As in most other areas of health instruction, teaching in grades 1-3 should be closely related to daily living at home and in the classroom. The content of instruction should be directed primarily toward the development of good general health practices.

In making use of the suggestions in this section, frequent references should be made to the sections on "Nutrition," "Rest, Work, Relaxation and Recreation," "Cleanliness," "First Aid," "Safety," and "Mental Health."

Desired Outcomes in Terms of Knowledge, Attitudes and Practices.

1. Understands what to do when the skin is cut or when the nose begins to bleed (See First Aid).
2. Understands that some bleeding from a small cut is not dangerous and, therefore, should not cause fear or worry.
3. Understands that it is natural for the heart to beat faster after running, jumping or other exercise.
4. Understands that the heart will work with less strain when the body gets adequate food, rest, sleep, relaxation, exercise (work and play). (See section on "Rest, Work, Recreation and Relaxation," and "Nutrition.")
5. Understands that exercise (play or work) helps to make the heart get stronger.
6. Understands that following an illness, depending upon the disease and the length of illness, it may be necessary to limit the amount of play or work activities. (Teachers should give individual guidance in this regard, based upon the doctor's recommendation, if any.)
7. Understands and appreciates the need for children who have rheumatic fever or other conditions that may effect the heart to follow strictly the doctor's directions.

8. Practices good health habits, such as getting adequate food, sleep, rest, recreation and relaxation. (See sections referred to above.)
9. Refrains from smoking or using tobacco in any form.
10. Refrains from drinking coffee and tea or taking other stimulants.
11. Stops to rest before getting too tired.
12. Reports illness to parent or teacher when ill from any cause and follows the advice given.

Suggested Experiences for the Child.

1. Practices good health habits daily.
2. Observes that pets rest after exercise.

Evaluation.

Observe the daily habits of the class which indicate their progress in achieving the objectives as outlined. No written test should be given.

GRADES 4-6

Primary emphasis should continue to be on good general health practices. Proper nomenclature should be used by the teacher and pupils so that pupils will learn a few scientific terms that will enable them to discuss intelligently the heart and blood. Too much emphasis should not be given to the learning of technical names. This is likely to be boresome and lessen interest.

Desired Outcomes in Terms of Knowledge, Attitudes and Practices.

1. Understands and practices the things suggested for grades 1-3. (See sections on "Personal Health Practices.")
2. Works and plays without tension and worry.
3. Does not continue working or playing until completely exhausted, but knows when he tires too easily and will report to teacher or parent.
4. Follows the advice of his parent or teacher in regard to playing after an illness.
5. Refrains from smoking or using tobacco in any form.
6. Refrains from drinking coffee and tea and taking other stimulants.

7. Goes to a physician for a medical examination each year and to a dentist twice a year for a dental examination.
8. Does not take any drugs unless prescribed by a physician.
9. Understands that bleeding from a minor cut usually stops quickly because blood clots when exposed to air.
10. Understands the elementary functions of the blood vessels—veins, arteries, and capillaries.
11. Understands that germs in the blood stream may be carried from one part of the body to another.
12. Knows that blood carries food and oxygen throughout the body.

Suggested Experiences.

1. Study the form of the human heart by looking at pictures, charts, or a model.
2. Study and discuss the size and location of the human heart in the body.
3. Talk about the reasons why the heart needs rest and how it relaxes between beats.
4. Discuss the things needed to keep the heart and blood functioning efficiently, such as rest, sleep, etc.
5. Draw or sketch a human heart.
6. Children who have been advised by a physician to modify their activities because of rheumatic fever, or heart defects, should be encouraged to follow the advice of the physician. For example, a child may need to rest during the physical education periods.

Evaluation.

1. A question or two may be included in a written general health test.
2. Pupils tell short stories about the heart and its work.
3. Observation of health practices of pupils.
4. Conferences with pupil and parents or nurse about child's health practices.
5. Class participation in discussions about what has been learned.
6. Child who has a heart defect follows the recommendations of his physician.

7. Other children help the child with a heart defect by showing him they understand why he needs to limit his activity.
8. Students get regular physical examinations.

GRADES 7-8

Most emphasis should still be on the practice of good health habits. Students should be encouraged and motivated to learn some of the important facts about the physiology and anatomy of the heart and circulatory system. Technical names may be learned by using them correctly in discussions.

Desired Outcomes in Terms of Knowledge, Attitudes and Practices.

1. Understands and follows good training procedures in getting in good physical condition for an active part in athletics.
2. Understands that the heart and some other internal organs do not grow as fast as the muscular and skeletal systems during the years of rapid growth.
3. Practices good health habits. (See sections on "Personal Health Practices.")
4. Understands that vitamin K helps coagulate blood.
5. Understands some of the uses of blood plasma and the need for blood banks.
6. Understands and practices certain first aid procedures for fainting, cuts, nose bleed, etc. (See section on "First Aid.")
7. Understands that his heart is in good condition. (Has regular physical examination, and follows suggestions of his family physician.)
8. Understands that heart diseases are leading causes of death in the United States and in North Carolina.
9. Understands some of the possible symptoms of rheumatic fever and rheumatic heart disease.
10. Understands how to apply a tourniquet for severe bleeding. Also knows why a tourniquet must be loosened every fifteen or twenty minutes.
11. Knows that blood carries food and oxygen throughout the body.
12. Knows that the arteries are blood vessels that carry blood with food and oxygen from the heart to various parts of the

body and that the veins are the blood vessels that return the blood to the heart.

13. Understands that there is no danger of a boy or girl hurting his heart under ordinary circumstances, provided he has a normal heart.
14. Understands that the only way to be sure the heart is well (normal) is to have an examination by a physician.
15. Understands that pains, sometimes erroneously called "growing pains," should be reported to parents and teacher.
16. Understands that long periods of strenuous activity carried on because of "pressures," such as pressures to win a championship game, should be avoided.
17. Knows that the healthy heart is a strong muscle and can do extra work without injury.

Suggested Experiences.

1. Find out what pupils know about the heart and its functions. Written and class discussions, etc., may be used.
2. A committee may visit the local health officer or a private physician to get statistics of deaths caused by heart trouble.
3. Make a detailed study of the heart by picture, filmstrip or model.
4. Invite a physician to explain to the class or to a committee from the class how the valves of the heart may be damaged.
5. Discuss:
 - a. Foods which are good blood builders.
 - b. Ways to prevent injury. (See section on "Safety.")
 - c. Reasons why fast growing boys and girls should not participate in too strenuous activity.
6. Demonstrate the use of a stethoscope. This may be done by a physician, the health officer, the nurse, the teacher, or by some students who have had instruction from a physician.
7. Secure an animal heart from the butcher and show the valves to the students.
8. Interview a number of adults who smoke. Ask them—
 - a. "Do you wish you had never started smoking?" If so, Why?
 - b. "What effect does smoking have on the heart beat?"
9. Demonstrate how to stop nose bleeding and what to do when one faints.

Evaluation.

1. Written or oral tests.
2. Class discussions of things pupils have done to prevent accidents that cause bleeding.
3. Teacher-pupil conferences to determine general good health practices.
4. Observation of health habits of students.
5. Observation of students' reaction to accidents that involve bleeding.
6. Ability to take part in discussions about the heart, heart diseases, and the blood system.

GRADE 9

Continue emphasis on health practices and activities which promote better understanding of the importance of good health. Pupils should gradually build up their knowledge of the anatomy and functions of the heart and circulatory system through discussions, readings, and projects. Do not drill on learning the names of the parts of the heart and circulatory system.

Desired Outcomes in Terms of Knowledge, Attitudes and Practices.

1. Practices good health habits learned in lower grades. Students may prepare and keep records of their health habits.
2. Understands where, how, and why to apply a tourniquet.
3. Understands how fainting can often be prevented.
4. Understands that the heart is a muscle and will develop, like other muscles, with exercise. (Play and work.)
5. Understands the importance of following "the physician's orders" when recovering from illness. Helps others to follow regulations.
6. Understands the importance of proper protection in cold or damp weather.
7. Understands how to treat another person who has fainted. (See Section on "First Aid.")
8. Has a routine physical examination periodically—yearly is preferable.

9. Understands the functions of the heart in supplying food, oxygen and secretions of glands to the various parts of the body.
10. Understands the functions of the red and white corpuscles (cells) of the blood.
11. Understands the importance of coagulation of blood when one is injured.
12. Understands how blood gets from the arteries to the veins.
13. Understands the differences between whole blood and blood plasma.
14. Understands the significance of the appearance of blood in the urine.
15. Understands the functions of the lymphatic system.

Suggested Experiences.

1. Make use of a "Blood Donation" activity in the community to discuss: (This may be done by committees.)
 - a. The need for a blood bank in the local hospital.
 - b. The need for blood to send to areas where there are emergency needs.
 - c. The need to have a blood supply on hand to use in disaster (flood, fire, wreck.)
 - d. Blood transfusions.
 - e. Blood typing.
 - f. Blood testing for diseases, such as venereal diseases, and diabetes.
 - g. The qualifications for being a blood donor and the reasons why boys and girls are not invited to be donors.
2. Demonstrate and discuss:
 - a. Measuring blood pressure (encourage pupils to read about it and ask questions). A nurse, physician, or teacher may do the demonstration.
 - b. Use of the stethoscope (if it has not been done in earlier grades).
3. Student groups or committees may work on the following:
 - a. Reasons why a football team is required to practice at least two weeks before the first game.
 - b. The different ways of making heart examinations.
 - c. Some diseases of the heart.

- d. Rheumatic fever—the age groups usually affected, the value of rest in the treatment, the possibilities of a rheumatic patient living a long life.
 - e. Uses of gamma globulin in immunizations for measles and other diseases.
 - f. Take the pulse of a baby, small child, a school child, young man, young woman, older man or older woman. Show these by graph, or other visual aid. (How fast does your own heart beat?)
 - g. Some protective functions of the blood.
 - h. The work of the national, State and county heart associations. (If the county has a heart association, a committee could visit its officers and learn about specific projects in the county.)
 - i. Blushing—what happens?
 - j. What is the purpose of a hemoglobin test?
4. Find out from reliable reference material and from medical personnel what affects the use of tobacco has on the rate and force of the heart beat. Use this information for class discussion.
 5. Interview a number of people who smoke to find out why they ever started smoking, how much smoking costs per week and if they would prefer not to want to smoke.
 6. Panel discussion. The panel may include students only or it may have students, parents, doctor, nurse, etc. Discuss the topic “The best advice for children and youths is to refrain from smoking until they are at least 21 years old.”
 7. Study of changes in physical activities which are advisable after middle age.
 8. Learn the functions of the lymph system.

Evaluation.

1. Observation by teacher.
2. Conferences with pupil.
3. Oral and written tests.
4. Pupil participation in class activities.

GRADES 10, 11, 12

A Few Suggested Experiences for the Other Classes in High School:

BIOLOGY.

1. Do a urinalysis test.
2. Make blood counts of white and red blood cells in a drop of blood.
3. Draw diagrams illustrating the circulatory system.
4. Discuss the functions of the various elements of blood.
5. Discuss the lymphatic system.
6. Discuss the functions of the various types of blood cells.
7. Discuss why donors are preferable to money when one has to have blood.
8. Problems for class work:
 - a. When tobacco is smoked or chewed, how does nicotine enter the membranes?
 - b. When smoke is inhaled, how does nicotine enter the mucous membranes?
9. Discuss reasons why the physician sometimes orders a person to stop smoking after he has a heart attack.

CHEMISTRY.

1. Coagulate some animal blood and separate blood cells from the plasma.
2. Study the effect of certain chemicals on the time needed for coagulation.

HOME ECONOMICS.

1. Discuss the reason pregnant women should have blood tests.
2. Observe and discuss the effect and possible dangers of tight garters.
3. Make Red Cross bandages.
4. Study and discuss iron deficiencies, including anemia and the foods that provide the best sources of iron.
5. Menstruation.

PHYSICAL EDUCATION AND ATHLETICS.

1. Safety and first aid. (See sections on "First Aid" and "Safety.")

2. Discuss reasons for:

- a. Rest after exercise.
- b. Physical examination before strenuous athletic competition.
- c. Gradual increase in activity.
- d. Emotional stress.
- e. No smoking or alcoholic beverages.

AGRICULTURE.

1. Hazards of farm equipment.
2. Farm accidents.
3. First aid.

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BOOKLETS AND PAMPHLETS:

1. "Your National Blood Program." American Red Cross, Regional Office, Atlanta, Georgia.
2. "Blood's Magic for All." Public Affairs Pamphlet. 22 E. 38th Street, New York 16, New York.
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 - "Rheumatic Fever, Childhood's Greatest Enemy."
 - "Know Your Heart."
 - "Your Blood Pressure and Your Heart."
 - "How to Live With Your Heart."

SOURCES:

1. North Carolina Heart Association, Miller Hall, Chapel Hill.
2. North Carolina State Board of Health, Raleigh.
3. American Medical Association, 535 N. Dearborn Street, Chicago, Illinois.
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5. American Red Cross, Regional Office, Atlanta, Georgia.

ALCOHOL EDUCATION

Some Basic Concepts for the Teacher

- A. Alcohol education is a part of education for successful living. The school has a direct responsibility toward preventing the impairment of our human resources through the use of beverage alcohol¹ by providing experiences for each pupil to have:
1. A chance to succeed in a manner satisfying to himself.
 2. Confidence enough in himself to perform smoothly with others without feeling inadequate or inferior.
 3. Self-confidence to face the facts and sufficient determination to act upon them.
 4. Understanding of himself sufficient to accept himself with a genuine feeling of self-respect.
 5. An independence relatively free from selfishness and superiority.
 6. The ability to act on his best judgment.²
- B. Factual knowledge about alcohol is important, yet the creating of favorable attitudes and good health practices should be a primary purpose in education about alcohol.
- C. There are many false beliefs and much misinformation which should be corrected before the truth can be appreciated. Here are a few examples of these misconceptions.
1. Alcohol destroys the brain cells.
 2. Alcohol is a stimulant.
 3. Alcohol injures the cells.
- D. Some basic facts about alcohol.
1. Alcohol is absorbed into the blood immediately. It is not digested.
 2. Absorption is delayed or slowed down, if taken when a person has just eaten.
 3. Alcohol is a depressant—not a stimulant—and in large amounts acts as an anesthetic.
 4. Small amounts will disturb feeling, movement and speech.
 5. Large amounts will cause intoxication.
 6. Over .4% concentration in the blood will usually cause

¹Beverage alcohol refers to ethyl alcohol used in alcoholic beverages.

²Refer to "Mental Health", this bulletin.

loss of senses. Larger amounts may cause death from paralysis of the nerves which control the respiratory system. Few people ever die from this because they "pass out" before they drink this much.

7. A depressant in varying amounts slows down the reaction time of the individual's thinking, heartbeat, breathing, walking, talking, coordination, etc.
 8. Alcoholic beverages affect the functioning of the body to a much greater degree than any damage it does to the tissues.
 9. By depressing the higher centers of the nervous system so that the controls are reduced or slowed down may make a person act as if he is "stimulated."
 10. Alcohol does contain calories, but it is not a complete food. It contains no minerals or vitamins.
 11. The use of alcoholic beverages may result in a person's developing certain diseases due to lack of vitamins and other food nutrients; neglect of hygiene, insufficient rest, over exposure, etc. Vitamin deficiencies connected with the use of alcoholic beverages are generally due to the poor diet of the alcoholic rather than to any direct toxic effect.
 12. Alcohol affects individuals differently.
 13. Intoxication is one means of escape from reality—there are many other means as well.
 14. Drunkenness (intoxication) offers but temporary relief from situations upsetting to the drinkers. It does not *solve* the problem. It often helps *create* many problems.
 15. Alcoholism is not inherited.
 16. It is dangerous for any adolescent to use alcoholic beverages.
- E. The nature and extent of the problem is varied—economical, psychological, physiological and sociological.
1. The underlying causes are usually associated with some other problem—e.g.:
 - a. A person who feels the need for "escape" may use beverage alcohol excessively as a means.
 - b. Lack of adequate recreational facilities in a community may lead young people to drink as a means for release of energy or for excitement.

2. Many children and youth come to school with already established ideas and ideals concerning the use of alcoholic beverages. In some cases customs and practices in the use of beverage alcohol have already developed.
3. Alcoholism is a public health problem.
 - a. Large numbers of people are involved. It is estimated that from 3 to 4 million people have difficulty because of drinking.* It is also estimated that about 50% of the jail commitments involve alcohol.
 - b. Alcohol is more than an individual problem—it is a family and community problem as well.
 - c. Alcoholism is an illness.
 - d. The excessive use of beverage alcohol provokes other distressing problems, such as—
 - The “broken” home.
 - The neglected family—children may become maladjusted individuals who in turn become alcoholics.
 - Crime—jail sentences.
 - Malnutrition of the individual himself.
 - Economic problems for individual, family and community.
 - Traffic accidents.
 - Personality adjustment problems become more acute.
 - Moral and religious problems.
 - Emotional problems.
4. Alcohol education requires special consideration because of the way alcohol acts on the human body and causes a person to act after drinking it. For example, a person acts differently after drinking alcohol than he does after drinking milk or fruit juice.
5. Those who use alcoholic beverages may be classified as follows:
 - a. Problem drinkers, including the alcoholics, those persons who cannot control the time or amount of their drinking.
 - b. Heavy drinkers, those persons who use alcoholic beverages at most all social occasions. (Money needed for other things is used for alcohol.)
 - c. Occasional drinkers, those persons who take a “social drink” or have “one or two beers” two or three times a week.

*McCarthy, Raymond. *Facts About Alcohol*. Life Adjustment Booklet. Science Research Associates, Inc., 57 W. Grand Avenue, Chicago, Illinois.

- d. The indifferent drinker, those who do not like the taste of alcohol nor its effects, but who will drink just to conform socially.

F. Some reasons why people drink.

1. To escape a personality conflict.
2. To be one of the crowd.
3. As a lark—especially the teen-agers—trying to be “grown-up.”
4. Because of family, national or religious custom.
5. To be “sociable”—just to be polite.
6. Because one gets “talked into it”—on a dare.
7. To escape physical or mental pain.
8. To escape from boredom—nothing to do.
9. Enjoyment of the “feeling” it produces—relaxing of moral controls.
10. Slave to habits.
11. Inability to solve present problems—lack of courage to “face things.”

G. The approach to teaching.

Health Education,¹ the 1948 joint report of the American Medical Association and the National Education Association, says that health education should take into account present day practices with respect to the use of alcoholic beverages and stimulants related to health and social aspects. High school students particularly should be taught actual facts, not prejudices, so that they can formulate their opinions with regard to their personal behavior.

It is agreed that it is dangerous for high school students to drink. They should have the opportunity to find out the reasons why it is dangerous for adolescents to drink.

The teacher should create an atmosphere conducive to discussion, keeping in mind that the pupils represent various home backgrounds, various church affiliations and various social groups. Therefore, the teacher should present unbiased up-to-date information in order that students may make intelligent decisions.

¹*Health Education*. AMA-NEA, National Education Association, 1201 Sixteenth Street, N. W., Washington, D. C. 1948.

In the lower elementary grades alcohol education should be a part of good general health education—answer children's questions truthfully about alcohol; provide help for individual children who may be in a family involved in an alcohol problem; help all children to adjust socially and emotionally. (See section on "Personal Health.")

In the upper elementary grades a few facts about the alcohol problem should be included, though most of the emphasis should be upon good general health education. (See other resource units.)

In the high school some direct instruction about alcohol is essential. A unit in the 9th grade health class is suggested. However, in some schools or with some groups it may be of more benefit to pupils to schedule the unit in the 8th grade. There is opportunity in many other subject areas for teaching about alcohol. In a "core program" the teaching about alcohol may be considered as family, community, or individual health problems. There should be *no special course in alcohol education* in the high school.

Guides for Teaching

GRADES 1-3

General Observations.

In grades 1-3 pupils are not yet ready to grasp and apply many facts. Educators are primarily interested in helping pupils develop favorable attitudes and practices. Therefore, the objectives of alcohol education in these grades are:

1. To build sound character with integrated personalities.
2. To help pupils understand and accept themselves and to feel secure, loved and wanted.
3. To provide the kind of atmosphere that promotes freedom and self expression and eliminates the need for the child to fear or escape reality. (See section on Mental Health in this bulletin pertaining to these grades.)
4. Be able to give an answer to "why?" if pupils ask.

Some Things to be Taught.

1. Good general health practices. (See other resource units.)

Attitudes to be Developed.

1. Refuse to take drinks or foods from "strangers."
2. Enjoy milk and fruit juices.

Activities.

1. See suggested activities listed in other areas.
2. Dramatize how it feels to be "left out."
3. Dramatize how we can have fun and include everyone.
4. Discuss games and stunts that include everyone in the group.

Evaluation.

1. Do all children seem to feel a part of the group?
2. Do children enjoy a variety of wholesome foods and drinks?
3. Do they know how to play many kinds of group games? Do they generally participate in group games?

GRADES 4-6**General Observations.**

1. In these grades the emphasis should continue to be upon successful living. (See Mental Health section.)
2. The "Reason Why" becomes more important at this age. It becomes more important to teach some facts in order to give a background to build desirable behavior and attitudes.
3. It is important to begin to develop concepts of alcohol and its relationship to social status, economics, safety, physical well-being and success in general.

Some Things to be Taught.

In addition to those general health practices in grades 1-3 the following may be included:

1. Alcohol is not a good food.
2. People who are intoxicated cannot act and think accurately.
3. There are good uses for alcohol.
4. Alcoholic beverages are expensive.
5. Emphasis should be upon the formation of good health habits—use of good beverages, food, wise expenditure of funds.

Activities.

1. List and discuss characteristics that make a person who is liked by others.

2. Make and serve fruit punch at a class party.
3. Have the coach, boy scout leader, or others, talk to class on the importance of keeping physically fit and mentally alert at all times.

Evaluation.

1. Does pupil like good food, milk and fruit juices?
2. Do pupils understand something of the contributions of alcohol to industry?
3. Do pupils seem to feel secure in the group?

GRADES 7-8

General Observations.

1. In addition to those listed under general observations in grades 4, 5 and 6, the student is faced with such immediate problems as:
 - a. Acceptance or rejection by the group or gang.
 - b. Being extremely nervous and shy due to physical changes.
 - c. Being able to say "no" when his judgment indicates he ought to refuse an alcoholic drink when offered.
 - d. Need for understanding physical development at this stage of growth.
 - e. Learning acceptable ways of having fun.
2. The student can begin to understand some of the socio-economic problems related to alcohol. For example: traffic accidents, family problems, welfare problems.
3. Fallacies concerning beverage alcohol should begin to clear up, based on scientific facts.
4. Individual children should be made to feel free to discuss personal problems privately with the teacher. Some of these may concern use of alcohol by members of their family.

Some Things to be Taught.

1. Physiological.
 - a. Alcohol is not a good food.
 - b. Alcohol is a depressant.
 - c. Alcohol may become habit forming.
 - d. The harmful effects of alcohol and what causes the harm.
 - e. All medicine should be prescribed by a physician.

f. Good judgment, the ability to reason, and self-control are among the functions to be adversely affected first by the consumption of beverage alcohol.

2. Psychological and social.

- a. Some job opportunities are closed to people who drink alcoholic beverages.
- b. A general knowledge of the effect of alcoholic beverages on behavior. Use of alcohol by grown-ups often makes them act immature.
- c. To take a drink just because others do may become a habit.
- d. It is false belief that the use of alcohol makes one more grown-up.
- e. Control of behavior is acquired as we mature emotionally— young people should not use beverage alcohol, since it interferes with acquiring desirable behavior control.
- f. An understanding of how one is “Growing Up” and what to expect because of physical and emotional changes, so as not to develop a feeling of dissatisfaction with himself (see “Mental Health”).
- g. Once a habit is formed, it is hard to break.
- h. Alcoholism is not only an individual problem, but a family and community problem.

3. Economic.

- a. There is a direct relationship between the excessive use of beverage alcohol and crime, accident, poverty and cruelty.
- b. The part alcohol plays in the State and/or county—tax funds, legislative concern, educational efforts.
- c. According to casual reviews, large amounts of money are spent on alcoholic beverages and patent medicines which contain a high percentage of alcohol.
- d. Alcohol dulls the senses so that a drinker does not have good judgment and muscular control.
- e. There are some good uses of alcohol in industry and medicine.

Activities.

- 1. Class may be divided into committees or groups and work on such problems as:
 - a. List characteristics that make a person socially acceptable.
 - b. List things alcohol does that affect the ability to *live with* others.

- c. List ways to have fun without drinking alcohol.
 - d. List qualities of an emotionally mature person. Discuss with class how home, school and community may contribute to these.
 - e. List ways to have fun at home.
 - f. List ways to have fun at school. Do some of these.
 - g. List ways to have fun in the community.
2. Panel discussion, roundtable, etc.
 - a. How can the community contribute to factors that promote a balanced personality?
 - b. How do you account for the actions of an intoxicated person?
 - c. How can non-drinking be encouraged in our own group?
 - d. Safety and the use of alcoholic beverages.
 3. Make and serve fruit punch at a class party.
 4. List ways that funds now spent for alcoholic beverages could be put to better use?
 5. Have pupils interview the coach, patrolman, boy scout leader, and others on the importance of keeping physically fit and mentally alert.
 6. Children may prepare reports or talks on the "Requirements of Certain Jobs That Involve the Responsibility for Lives of Others"—bus driver, cab driver, etc.

Evaluation.

1. Are pupils becoming better able to face problems and work out satisfactory solutions?
2. Have pupils learned some facts about alcohol?
3. Do pupils have some understanding of some of the social and economic problems involved in alcoholism?

GRADE 9

General Objectives. >

Greatest emphasis should continue on development of well integrated personalities and good health practices. In addition direct instruction about alcohol should be provided, based on the needs and interests in so far as each can be determined.

In planning and developing any teaching unit about alcohol, many phases of the problem need to be considered, including the following:

1. How to be popular with the group.
2. Need for the feeling of security—for belonging to the gang.
3. Need for others to understand the thinking and feelings of this age group.
4. Alcoholism is a public health problem, an illness.
5. The use of alcoholic beverages is accompanied by other behavior problems—"You get drunk, so what?" "You got drunk, then what?"
6. Those who drink excessively usually create or help develop other problems, such as:
 - a. Malnutrition.
 - b. Financial distress of the family.
 - c. Marred reputation.
 - d. Traffic accidents.
 - e. Accidents (See "Safety" section).
 - f. Gets in jail.
 - g. Loses job.
 - h. Loses wife (or husband) and children.
 - i. Community pays his bills. (A burden on his friends.)
 - j. Exposes self to other diseases.
7. There are many fallacies about the benefits of alcohol. For example,
 - a. Alcohol makes you warm on a cold day.
 - b. Alcohol will cure a cold.
 - c. Alcohol is a stimulant.
 - d. Alcohol destroys the brain cells.
 - e. Alcohol gives one self-confidence.

Introducing the Unit.

Introduction to the unit may be in one or more of many different ways. Here are a few suggestions:

1. Asking some thought-provoking questions.
2. Suggestions from the class—spontaneous or invited.
3. Reference to certain materials. (See list at end of this outline.)
4. Proceeding into this unit from a study on personality, mental health, community responsibility, etc.
5. Use of a check list or an information test.

Some Things to Teach.

1. Physiological information:
 - a. Alcohol acts on the nervous system like ether (a depressant).
 - b. Alcohol gets to the blood stream directly by absorption.
 - c. The way a stimulant acts in the body—and how it makes the body act.
 - d. The way a depressant acts in the body—and how it makes the body act.
 - e. Why people act as if “their values have been relaxed” after drinking alcohol. (That “don’t care” feeling.)
 - f. Diseases develop.
 - g. Nutrition.
 - h. “Tolerance” for alcohol and what does it mean?
 - i. The alcoholic content of beer, wine and liquor. (Facts and figures.)
2. Social-psychological information and attitudes—Why people drink beverage alcohol:
 - a. A family custom (from foreign countries).
 - b. Customary in certain social strata.
 - c. To be a part of the gang—to belong.
 - d. To forget troubles—but it creates more.
 - e. Bored.
 - f. Afraid—to go to a party, to go home after losing job, to face reality.
 - g. Sick.
 - h. “The thing to do”—so they think.
3. Economic and community.
 - a. Alcohol is very expensive. Sometimes too much of the family budget is used for it.
 - b. Community services for alcoholics are expensive to the community—jail, police, courts and rehabilitation services.
 - c. Services for the family of the drinker are expensive to the community—aid to children and wife.
 - d. Medical services for the alcoholic are expensive.
 - e. Traffic control—very important in youth group.
4. Help for the alcoholic—organizations and institutions including:
 - a. Alcoholics Anonymous—A unit in most larger towns.

- b. Alcoholic Rehabilitation Program—Hospitals Board of Control, Raleigh.
 - c. Camp Butner Rehabilitation Center, Camp Butner, N. C.
 - d. State Hospital, Raleigh.
 - e. Private hospitals—The Keely Institute, Greensboro, N. C., and others.
 - f. Research—
 - (1) U. N. C. medical school soon to have a research unit.
 - (2) Laboratory of Applied Physiology—Yale University, New Haven, Conn.
 - g. Church and service groups, including the Salvation Army.
 - h. State Departments of Public Welfare.
 - i. Public health departments.
- j. Contemporary customs and fashions in drinking.
- a. Do more people drink now than when your parents were young?
 - b. Do more people begin drinking at a younger age?
- o. Facts about the use of alcohol in industry and medicine.
- a. Many drugs are dissolved in alcohol.
 - b. Alcohol is used in sterilizing surgical instruments.
 - c. Alcohol is used in radiators as an anti-freeze.
 - d. Alcohol is used in flavorings.
 - e. Alcohol is used in paints and perfumes.

Activities.

- 1. Provide a good reference shelf or library of materials on alcohol.
- 2. Plan and carry out panel discussions, group reports, round table discussions, individual research projects on topics, such as:
 - a. How can I be popular without drinking, especially when I go with a boy who drinks? Discuss desirable ways of gaining popularity.
 - b. Will drinking make me fat?
 - c. Why do people drink alcoholic beverages?
 - d. How do most people feel about the use of alcoholic beverages today?
 - e. Why do some people consider drinking a sign of being "grown-up?"
 - f. Do statutory laws solve the problem?
 - g. What are some effects of alcohol on the body?

- h. If I don't like coffee, the hostess readily accepts my refusal. Should not the same apply to alcohol?
 - i. What is an "alcoholic?"
 - j. Alcohol is more than an individual problem; it is a family and community problem.
 - k. Why do people pay a big price for a football ticket, then get so drunk they can't see the game?
 - l. Should one drink just because "the others are doing it?"
3. Do some research and have general discussions on fallacies and superstitions such as:
 - a. One must take a drink to cure snake bite.
 - b. Alcohol makes one warm in cold weather.
 - c. Alcohol stimulates.
 4. Suggest things that might be done in a problem situation rather than trying to escape by getting drunk. Role play or dramatize what could be done in some of these situations:
 - a. A man who has lost his wife.
 - b. A boy whose girl has a date with another boy.
 - c. A person who loses a job.
 5. From books, parents, physician or other community leaders, *find out* and *list*:
 - a. Reasons why they say it is inadvisable to drink alcohol.
 - b. Reasons why they say one should drink alcohol.
 6. Have role-playing situations of the following:
 - a. Demonstrate ways to refuse a drink gracefully, yet without feeling left out.
 - b. Show how it feels to be left out.
 - c. Tell how you would refuse to ride home with a person driving who has been drinking.
 7. Discuss what alcohol does to the body that makes one act so differently.
 8. Discuss some ways young people can discourage "social drinking."
 9. Why do people drink? List some reasons. How may these reasons be changed? Can they be changed in your community?
 10. Survey the community for recreational opportunities and facilities.

11. Study activities of organizations, such as "Allied Youth," "Temperance Youth Councils," etc.
12. Discuss the reasons why it is dangerous for any adolescent to drink.
13. Discuss some ways money spent for alcoholic beverages might have been used more wisely in the family.
14. Discuss how money spent for welfare services for a drinker and his family might have been used for better services.

GRADES 10, 11 AND 12

In senior high school grades (classes) where there is no special health course, alcohol education may be made a part of biology, home economics, sociology, physical education, driver education, chemistry, or the guidance program.

Some suggestions in these areas are:

1. Creation of a permissive atmosphere, so that students may feel free to raise questions for discussion.
2. Provision of information for students—scientific material, well informed teachers, other resource personnel.
3. Help students look beyond emotions to facts—help students develop a philosophy of living. Advise them to consult parents, minister, physician, or other community leaders.
4. Recognize alcoholism as a form of illness—affecting individual, family and community.
5. Acquaint students with community resources available for scientific information, treatment, and rehabilitation of the alcoholic ill.
6. Help each student become and remain a part of his group.

A few suggestions in certain subject areas are indicated below:

BIOLOGY.

1. What alcohol does to the body.
2. Dangers to certain parts of the body.
3. Attention to cirrhosis of the liver.
4. Effect of alcohol on body tissues.
5. Absorption.
6. Alcohol as a preservative.

7. Effects of alcohol on the nervous system. Show through discussion, films and reading how alcohol affects the centers of reasoning, or "conscience." With these centers "knocked out," the individual will release information and engage in conduct usually kept under control.

CHEMISTRY.

1. Alcohol and digestion.
2. Discuss chemical analyses to determine intoxication.
3. Study elements composing alcohol.
4. Industrial uses of alcohol.
5. Different kinds of alcohol and the elements in each.
6. Effect on body chemistry.
7. Distillation.
8. Action of alcohol in the stomach.
9. Have physician discuss body chemistry and alcohol.

AGRICULTURE.

1. Develop school and home projects relating to agriculture and discuss benefits of these to the family.
2. F. F. A. and N. F. A. activities.
3. Grain for the manufacture of alcohol.

HOME ECONOMICS.

In the home economics instruction, emphasis is put on good food, good nutritional practice, managing the family resources, sharing responsibilities, good family relationships, etc.

In addition the following may be considered as good alcohol preventive measures:

1. Participation in the activities of the Future Homemakers of America and New Homemakers of America.
2. Recreational activities of the FHA, NHA and other clubs such as Future Farmers of America, New Farmers of America, teen-age clubs, recreational centers, and church youth groups.
3. In the studies on "Preparation for Marriage and Home Making," the following may be included:
 - a. Good family relationships. (See section on Wholesome Life Relationships.)

b. Things which upset the family budget—

Illness.

Expensive pleasures and entertainment.

Alcohol and other things immoderately used.

c. *Talk about ways to be popular without drinking.*

d. How much does family custom influence the marriage of two young people? For example: The family of the boy uses beverage alcohol, whereas the family of the girl opposes. What influence do you think this would have upon the new couple?

e. What are some of the reasons why the husband often drinks "with the boys," or at some "tavern?" Is it to get away from a nagging or unsympathetic wife, to seek amiable companionship, or just to get a drink?

f. Talk about family recreation—What recreational activities does each member participate in with his own family? What are some recreational activities they might help plan with their families?

g. On accepting responsibility in the family. What are some of the responsibilities of each member for various activities. These may be interpreted through role-playing demonstrations. How can you (as a member of the family) help others in your family to see and accept their responsibilities?

PHYSICAL EDUCATION.

The physical educator has an opportunity to promote wholesome living with desirable "outlets" for the students.

Here are a few of the things which may be done by the physical educator:

1. Help student learn many skills so that he may feel "secure" in his sports and recreational activities.
2. Promote good health practices in order that he may achieve the most out of sports.
3. Point to examples of training rules for athletes.
4. Help student plan recreational activities for after school hours.
5. Plan and help students carry on co-recreational activities, so that boys and girls may learn to play together and not feel self-conscious or insecure when thrown together in social situations.

6. Student learns how to become a good loser.
7. Organize and carry on intramural sports and recreational programs through which *all students* may have opportunity to participate. This cannot be over-emphasized in contrast to emphasis on developing the "star athlete."
8. Help students develop skill and appreciation in the kind of recreation for carry-over in planning recreation in his own family.

DRIVER EDUCATION.

1. Define the standards of physical fitness and mental alertness—how intoxicating beverages affect such fitness and alertness.
2. Cite laws concerning intoxicated drivers.
3. State amounts of alcohol required to influence efficiency in ascertaining the facts. Learn about the tests to prove intoxication:
 - a. Alcometer (breath test).
 - b. Blood test—blood alcohol.
 - c. Urinalysis test.
4. Use the National Safety Council figures to show the percentage of accidents in which alcohol is involved.
5. Study the probability of accidents in the drinking driver; the sober driver.
6. Point out how one "under the influence" could not possibly comply. (See "Safety" section.)
7. Prepare charts or posters showing the effect of alcohol on muscular skills, such as in the coordination of muscles used in walking or driving.

GUIDANCE SERVICES.

Guidance personnel in the school may help prevent alcoholism by:

1. *Planning Group Activities to:*
 - a. Provide information on the effects of alcohol.
 - b. Give the student an opportunity to participate in discussion of problems similar to his own.
 - c. Plan activities which will give student an opportunity to change his pattern of behavior, so that he will take part in more desirable activities, such as some wholesome recreation.

2. *Providing Counseling.*

When students have the assistance of trained counselors with whom they can talk freely and confidentially about their problems and receive help in understanding themselves, they are better able to make desired adjustments. Following are some of the ways the counselor may assist the individual:

- a. Provide opportunity for students to talk privately, freely, confidentially.
- b. Assist student in understanding himself and his problem.
- c. Help the student consider possible solutions to his problems.
- d. Health officer and public health nurses can act as counselors or assist the counselor in certain phases of the problem.

3. *Working with other personnel.*

Serve as a "resource" to school personnel by providing information and materials. Avoid use of the zealous but misinformed.

4. *Refer cases.*

When clinical cases develop or are discovered, the counselor should consult with professional personnel and should refer the student to the public health nurse, family physician, social worker, psychologist, or minister, as the case may demand—but in many instances first to the public health nurse connected with the school.

SOCIOLOGY AND ECONOMICS.

1. Survey community to find out what contributions are being made or could be made toward successful living—the elimination of stress and strain.
2. List some things the organized club in school or in a community might do to promote successful living.
3. Discuss "well integrated personality."
4. Discuss the problems of the "heavy drinker" as they affect the family and community.
5. Discuss responsibility as a voter on State-wide problems, such as a State referendum for alcohol beverage control.
6. One authority claims "Alcohol is a cause of mental disease." Arrange for a panel discussion to debate this statement.

7. Locate the nearest child guidance or mental hygiene clinic. Find out what it contributes in the prevention of alcoholism.
8. Use of alcoholic beverages by "teen-agers" in the community is decreasing or increasing. Which? Can a committee from the class find the facts?
9. The class may want to divide into groups and do work on the following problem: What beverage alcohol has meant to North Carolina, economically, last year or any recent year?
 - a. Amount of tax from liquor, beer and wine.
 - b. Cost of the Alcoholic Rehabilitation center at Camp Butner.
 - c. Cost of other hospital facilities for problem drinkers.
 - d. Traffic accidents attributed to alcohol or in which alcohol was involved.
 - e. Cost for maintenance of jail facilities to house drinkers.
 - f. Cost of other services to the drinkers—policemen and court officials.
 - g. Cost of welfare services given the family of drinkers—food, clothing, medical care.
 - h. How much do citizens of North Carolina spend for alcoholic beverages?
 - i. Taxes and what are they used for.
10. Talk about things the class can do to lessen the alcohol problem in this community.
11. What does "temperance" mean to you?
12. What part does the school have in preventing alcoholism?
13. What part can community recreation play in the prevention of alcoholism?
14. Consult resource personnel about problems of alcohol in your community. Class may want to invite a member of the welfare department, a judge, the jailer, a minister, a physician, or a member of Alcoholics Anonymous to visit and talk with the class.
15. Develop sound attitude toward "clean" government and law enforcement. What can be done about the "bootlegger?"

SELECTED REFERENCES

Most health education basal textbooks and the supplementary health textbooks from 6th grade through high school contain information about alcohol. Some information is also contained in science texts, sociology, civics, encyclopedias, etc.

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 - No. 1. *The Problems of Alcohol*.
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SOURCES OF INFORMATION:

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NARCOTICS EDUCATION

The problem of narcotic addiction is a very old one, but the addiction to narcotic drugs by teen-agers is relatively new. According to reports from the Federal hospitals in Lexington, Kentucky, and Fort Worth, Texas, about admissions, and from other authorities, the problem has increased tremendously since World War II. To date (1953), this problem is not a great one among North Carolina youth.

Information About Narcotics.

A Narcotic.

A narcotic is a drug which in proper doses as prescribed by a physician relieves pain and induces profound sleep, but which in poisonous doses produces stupor, coma, or convulsions. Many narcotic drugs tend to be habit-forming and continued use of them nearly always leads to addiction.

Drug Addiction.

Drug addiction is a condition brought about by repeated use of certain narcotic drugs to the point where one has developed an habitual craving for the drug. Some drugs not classed as narcotics may cause addiction. The Expert Committee on Drugs Liable to Produce Addiction of the World Health Organization gives the following definition of drug addiction:

"Drug addiction is a state of periodic or chronic intoxication detrimental to the individual and to society, produced by the repeated consumption of a drug (natural or synthetic). Its characteristics include, (1) an overpowering desire or need (compulsion) to continue taking the drug and to obtain it by any means, (2) a tendency to increase the dose; and (3) a psychic (psychological) and sometimes a physical dependence on the effects of the drug."¹

The Chief Narcotics.

"The chief narcotics are opium and three of its derivatives (codeine, morphine, and heroin), cocaine, and marihuana. The barbiturates, in many different chemical forms, are commonly regarded as hypnotic rather than narcotic. Medical dictionaries define narcotic as a drug that allays pain and induces sleep, and a hypnotic as a drug that induces sleep.

¹Expert Committee on Drugs Liable to Produce Addiction, Report on the Second Session, World Health Organization. Technical Report Series No. 21, March, 1950.

Strictly speaking, the two terms have separate meanings. European medical authorities use the term "narcotic" to include "hypnotic" and American Medical writers use both terms with reference to barbiturates."²

Barbiturates (Sleeping Pills).

The following factors concerning the barbiturates make education relative to these drugs imperative:

1. They are being used too freely without authorization from a physician. In many places it is relatively simple to buy these drugs.
2. Excessive use may lead to irresponsibility, causing one to take enough to cause death. More than a thousand deaths a year in the United States are caused by the unwise use of barbiturates, more than from taking any other drugs.

Causes of Narcotic Addiction.

There are two effects of drugs upon the human which make narcotic addiction possible.

1. *Physiological effects.* The body is capable of developing a tolerance for opium and its derivatives so that greatly increased dosages are required to produce the physiological "kick." As dosages are increased the body adapts its internal functioning so as to become more sensitive to the stimulation or hormones, enzymes, etc. When the drug is withdrawn this increased physiological sensitivity continues causing unpleasant reactions, such as nausea, diarrhea, increased blood pressure, etc. These symptoms can be relieved by another dose of the drug. However, these symptoms disappear, *without drugs*, in about ten days and are no more unbearable than similar symptoms of intestinal influenza. The dosage of the drug required to relieve these symptoms is seldom the amount of the drug taken by addicts. The overdosage is taken to produce psychological effects.
2. *Psychological effects.* The emotionally immature person who is unable to face normal problems of everyday life finds his self-critical abilities deadened by the drug. His feelings of failure and inadequacy are eased and he experiences a state of euphoria or false sense of well-being. Thus, true

²Narcotics, *The Study of a Modern Problem*. California State Department of Education, Sacramento, 1952.

drug addiction becomes a method of adjusting to the immature personality—just as alcoholism and the psychoneuroses, become such for other immature personalities.

What the School Can Do.

It is generally agreed that the school, as one of the agencies in the community, should take whatever steps are necessary to do its part in helping to meet this problem.

From the above statements about the cause of narcotic addiction, it becomes obvious that a major function of the school in combating narcotics addiction lies in the area of helping children to lead happy and effective lives.

By consulting the material in the references, at the end of this unit, it is evident that there is some disagreement about the advisability of teaching the facts about narcotics in the schools. Also, some of the leaders in North Carolina disagree to a certain extent. Some say that the problem is not serious here and that teaching about it may lead to experimentation. Others say that North Carolina youth travel to the places in the Nation where the problem is prevalent, and therefore, need information about narcotics and an understanding of the problem in order to make intelligent decisions.

The brief suggestions contained in this bulletin are generally accepted by most leaders at the present time. As more information becomes available and as the need for more material becomes evident, it will be made available to all schools, probably through a supplement to this bulletin.

General Suggestions to the Teacher.

1. In most cases direct instruction about narcotics and other drugs should not be taught below the 9th grade. However, where pupils seem to have special needs, instruction about narcotics may be given in the 8th grade and even in the 7th grade. This instruction should be carried on so that the pupil will learn the truth about narcotics—not “veiled” in any way that could lead to misunderstandings or misinformation.
2. Teachers should be *extremely cautious* in labeling any student as a user, but should report any deviations from normal behavior or signs of defects (absences without good reason, sudden loss of weight, very noticeable changes in behavior) as *indications that something is wrong*.

3. Individual health guidance should be available to those pupils who need it to:

Help them understand their emotions and their personal problems.

Help them face their problems and work through to a satisfactory solution.

4. The school should consider itself as just one of the community agencies concerned with this problem. The school should cooperate with and seek to get the cooperation of other agencies to the extent necessary to cope with the problem.
5. Information about the narcotics problem is changing constantly. Teachers should take advantage of their opportunities to keep themselves informed and up-to-date on information. The school should provide opportunity in case none is available.
6. The school should provide up-to-date authentic reference materials about narcotics.
7. The school should assume some responsibility for helping to meet the leisure time needs of youth.
8. When planning instruction, the teacher should take into consideration certain pertinent facts about the problem of narcotics:
 - a. At the present time there is very little that can be done to cure the narcotic addict. Therefore, the teacher's part is very important in *educating to prevent addiction*.
 - b. Addiction to drugs is very often connected with theft and other crimes committed to get funds to purchase the "dope."
 - c. Teen-agers who use narcotics begin the use of them or other drugs for one or more of many reasons:

Because of feelings of inadequacy.

To experiment—they are looking for a thrill.

Lack of information of what may and likely will happen to them.

They think, "It can't happen to me."

Take it to belong to "the group," to be a "good sport."

Drugs were necessary during a serious illness but their use was continued after illness was cured.

UNIT FOR HIGH SCHOOL USE

The suggestions in this unit should be of some help to teachers in developing teaching units about narcotic drugs, or in coordinating information about narcotics with other subject areas. Such a unit may be developed in the 9th grade health course, in biology, in sociology, in home economics,

or in whatever place in high school it will fit best. Any suggestions here should be adapted to the needs of the local school and community.

Problems for Study.

1. What is meant by drug addiction?
2. Who becomes a drug addict? Is it always the person who lives "across the track," in crowded conditions, or in a broken home?
3. Why do teen-agers start smoking marihuana?
4. What is the difference between a narcotic drug and a stimulating drug?
5. What are some of the narcotic drugs?
6. What are some stimulating drugs?
7. What is meant by a habit forming drug and an addicting drug?
8. What are some reasons why drug addiction is such a serious problem to the individual? What percent of the addicts from the Lexington, Kentucky, hospital can be declared cured?
9. What is the State of North Carolina doing to control narcotics? What is the Federal government doing? The United Nations?
10. What is your community doing to prevent narcotic addiction?
11. To whom in North Carolina would you report a suspected user or peddler?
12. What is the extent of the narcotics problem among teen-agers now as compared with about 10 years ago?
13. What can your class do to prevent narcotic addiction?
14. Is there any way of finding out the extent of the problem in your community?
15. What is the extent of the "sleeping pill" problem in the United States? In your community?
16. Why do people keep on using narcotics when they know better?
17. How much should the schools teach about narcotics to senior high school students? To junior high school students?
18. Why has the "sleeping pill" problem become so dangerous?
19. Why are narcotics so useful in medical care?

Examples of Activities.

1. Pupils may find out how much they know of the facts about narcotics by answering questions on a test or questionnaire.
2. Pupils may indicate their interest about narcotics in one of several ways—by questionnaire, in class discussion, by use of unsigned statements dropped into "the question box."
3. Collect magazines and news articles and share with other members of the class.
4. Arrange a display of library materials.
5. Report news story about narcotics.
6. Through committees or small groups:
 - a. Study factors which help to prevent the narcotics problem.
 - b. Study factors which contribute to the problem.
 - c. Make student surveys of leisure-time activities of the students.
 - d. Find out what boys and girls would like to do in their leisure time.
 - e. Make a survey of community recreation programs.
 - f. Prepare charts and graphs to show findings in c, d, and e.

7. In a role-playing situation show how a youth may be approached to try a narcotic; and how he would refuse.
8. Share findings in the above studies with the entire class and with other groups if possible.
9. Write articles for school or town paper, if it seems advisable.
10. Prepare a list and spot-map locations of desirable recreational facilities in the city.
11. Discuss the question: Is it stupid or "smart" to experiment with narcotics?
12. Develop a list of recreational activities to be carried on:
 - a. At a school party.
 - b. On a picnic.
 - c. At a home party.
 - d. At a church party.
13. Plan things to do at get-acquainted parties at the beginning of school.
14. Discuss the value of the narcotic drugs in the practice of medicine.
15. Have committee of pupils visit a druggist to learn about the requirements of the law concerning the dispensing of narcotics.
16. If there is a narcotic agent available, the class may find out what the government does to prevent smuggling.
17. Discuss: Is anything to be gained by driving oneself until artificial means are necessary for staying awake or going to asleep?
18. Study the latest legislation concerning narcotics in North Carolina. In the Nation.

Evaluation.

1. Do students feel they have found the answers to questions they had about narcotics?
2. Do all students know where to go for authentic information about narcotics?
3. Has this class group or individuals in the group been able to make some contribution toward a preventive program in the school or in the community?

The above evaluations may be made by teacher observation, interviews with individual pupils, in signed written statements by pupils, in class discussion, by paper and pencil test, and by interviews with parents and others who work with these students.

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1. Vogel, Victor and Vogel, Virginia. *Instructor's Guide to Facts About Narcotics*. Science Research Associates, Chicago, Illinois.
2. Williams, Jesse Fiering. *Narcotics—A Study of a Modern Problem*. California State Department of Education, Sacramento, California. 1952.
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PERSONAL CLEANLINESS AND GROOMING

It is recognized that in every phase of personal health, cleanliness will be stressed over and over again. However, it is for the sake of re-emphasis and presenting another possible approach that a separate unit on personal cleanliness and grooming is included in this bulletin.

GRADES 1-3

In the primary grades the major emphasis is placed on the development of favorable health attitudes and practices, rather than learning scientific information which underlie the justification for the practice. Children should never be made to feel badly about not practicing some health habit that requires a facility which they do not have at home.

Objectives.

1. To promote an appreciation for cleanliness.
2. To help the child develop cleanliness habits.
3. To motivate interest in cleanliness through cleanliness in life situations.
4. To help any child who needs to become more accepted by his group through improved habits of cleanliness.

Desired Outcomes in Terms of Knowledge and Understanding.

1. Knows that by keeping his hands clean he is helping to protect himself from germs and that clean hands help his appearance.
2. Knows that clean handkerchiefs or tissue are needed for health protection.
3. Knows how to wash his hands and bathe himself.
4. Knows how to brush his teeth properly.
5. Knows that many cleanliness practices should become habits.
6. Becomes familiar with the articles necessary to keep his person clean.
7. Knows that each person should have his own towel, tooth-brush, and comb.

Desired Outcomes in Terms of Attitudes and Appreciations.

1. Enjoys feeling of being clean and wants to keep himself clean.
2. Appreciates clean and frequent change of clothing including night clothes for sleeping.

Desired Outcomes in Terms of Habits and Skills.

1. Washes his hands after going to the toilet, before eating or handling food or dishes, without having to be reminded too often.
2. Carries a clean handkerchief or tissue and uses it to cover coughs and sneezes.
3. Keeps toilet articles in order.
4. Sleeps in night clothing when he has it.
5. Has developed such habits as brushing the teeth, combing the hair, and cleaning the nails.
6. Hangs up clothes.
7. Keeps all clothing clean, including shoes and socks.

Suggested Experiences and Activities.

1. Learns how to file and clean the nails through demonstration and practice.
2. Informal discussions and conversations about daily personal cleanliness and grooming:
 - Getting ready for school.
 - Getting ready for bed.
 - Getting ready for meals.
 - Getting ready to go home.
3. Playing with dolls. When this activity is supervised or directed by the teacher, the children may learn much about caring for their bodies.
4. Compose poems and songs about cleanliness.
5. Write original plays for dramatization.
6. Make individual health booklets.
7. Use local resource persons when they can make a contribution.
8. Give an assembly program with demonstrations showing cleanliness and grooming practices, such as brushing teeth, washing hands, brushing hair, and cleaning shoes.
9. Learn how to wash socks and underclothing.

Materials to Use in Display, Demonstration and Discussion.

Handwashing facilities.	Bath cloth.
Full length mirror.	Tooth brush.
Models of teeth.	Tooth powder and paste.
Soap.	Comb and hair brush.
Towels.	Charts.
Tissue.	Clothes brush.
Nail file.	Well-equipped shoe shine box.

Evaluation.

The teacher should help the child build standards for cleanliness and grooming by which the child may evaluate his own progress. The class may work out a simple check list for members to use in self evaluation. Testing at this grade level is not very satisfactory. Daily observation by the teacher to note the development of favorable health habits, practices and appreciations is suggested.

GRADES 4-6

Most children in these grades are ready to ask "why" concerning things which were previously accepted without asking the reason. Therefore, more factual or scientific information along with practices is provided for these grades.

Objectives.

1. To further develop the child's desirable habits and practices.
2. To promote the development of cleanliness habits through integrated activities.
3. To help the child understand the value of cleanliness to himself and others.

Desired Outcomes in Terms of Knowledge and Understanding.

1. Understands some of the "why" of cleanliness.
2. Knows the correct use of washing and drinking facilities.
3. Knows how to use and keep toilet facilities sanitary and neat.
4. Realizes the importance of regular cleanliness practices.

5. Knows the kind of articles and equipment that aid in cleanliness.
6. Knows how to care for his own hair, skin and nails.
7. Knows that some of the more common diseases may be spread through unclean handling of food.
8. Knows that cuts and sores should be cleaned.
9. Knows how to help select and care for shoes, socks, and other clothing.
10. Knows that it is insanitary to spit on the floor or sidewalk.
11. Understands the need for changing his clothes when they get dirty.

Desired Outcomes in Terms of Attitudes and Appreciations.

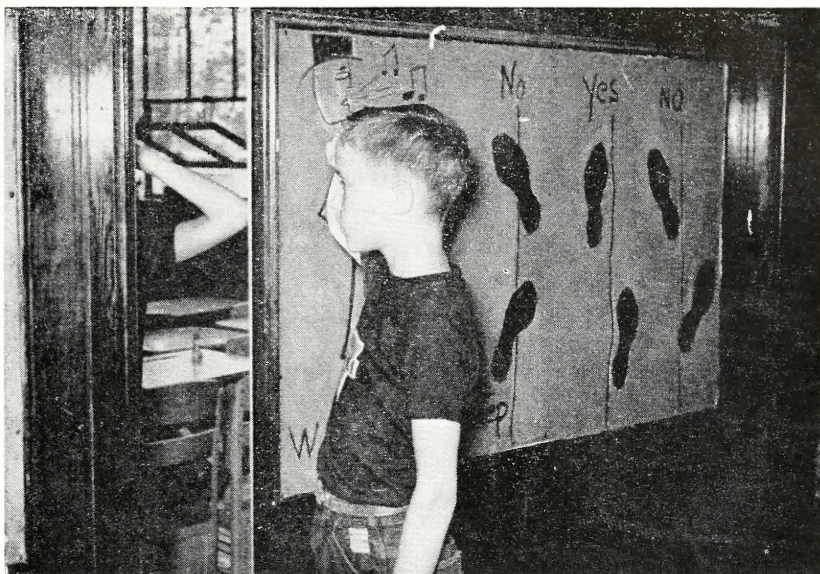
1. Appreciates the desirability of looking clean and neat.
2. Likes to assume responsibility for his own personal cleanliness.

Desired Outcomes in Terms of Habits and Skills.

1. Is careful about his personal appearance.
2. Bathes often.
3. Wears clean clothing.
4. Is able to assume some responsibility for keeping younger children clean.
5. Uses his own tooth brush, comb, towel, bath cloth, etc.

Suggested Experiences and Activities.

1. Study cleanliness as it is related to other areas of work.
2. Produce plays, radio broadcasts, and musical skits.
3. Organize health clubs to carry on activities, such as:
 - Wash own socks at home.
 - Make display of cleaning items.
 - Arrange (with the teacher) for someone to talk to the class.
 - Take part in the "morning inspection."
4. Make a study of problems related to cleanliness.
5. Discuss the advantages of a good personal appearance.
6. Demonstrate how to clean nails, shoes, etc.



Practicing good grooming

7. Demonstrate how to wash and care for socks and stockings.
8. Have a demonstration of washing hair. Discuss materials used in the demonstration.
9. Everybody practice good grooming.

Evaluation.

Daily observation by the teacher for:

1. Improved health habits and personal appearance.
2. Appropriate tests.

Materials.

- | | |
|-------------------------------------|---|
| 1. Posters. | 6. Articles used to keep clean (cosmetics, deodorants, shampoo, comb, brush). |
| 2. Charts. | 7. Nail files. |
| 3. Films, slides, and film-strips. | 8. Soap. |
| 4. Mirrors. | 9. Basin. |
| 5. Sanitary handwashing facilities. | |

GRADES 7-8

Sometimes boys and girls in these grades may appear to be slovenly in dress. Often this is a "cover up" for some of their feelings. Occasionally boys try to keep anyone from knowing they are interested in their appearance.

Re-emphasis should be placed on the cleanliness taught previously. Provide as many opportunities as possible for the pupils to practice the habits suggested for the lower grades. Adequate facilities should be provided, including soap, towel, hand washing facilities, mirrors, and time should be scheduled.

Objectives.

1. To aid the child in the continued development of cleanliness habits.
2. To integrate and correlate the cleanliness activities with the subject matter in the health text.
3. To show the relationship between good health and personal cleanliness.
4. To show the relationship between cleanliness and grooming.
5. To guide pupils in selecting and buying the necessary toiletries.

Desired Outcomes in Terms of Knowledge and Understanding.

1. Knows that one should bathe after vigorous exercise.
2. Knows where he can find authentic information on how to keep the body clean.
3. Knows the proper clothes for different occasions and weather.
4. Knows how to select and care for his clothes and shoes.
5. Knows how to evaluate radio and newspaper advertisements of drugs and toiletries.
6. Knows the purpose of germicides, antiseptics and disinfectants.
7. Understands that "adolescent pimples" are a natural characteristic of many teen-age pupils. General hygienic habits should be emphasized to help minimize this condition.
8. Understands the importance of frequent baths. Girls should give special attention to this during menstruation.

Desired Outcomes in Terms of Habits and Skills.

1. Applies information gained concerning cleanliness to daily activities and experiences.
2. Buys the right kind of cleansing agents for personal and laundry use.
3. Uses antiseptics, germicides and disinfectants intelligently.
4. Keeps himself clean.

Desired Outcomes in Terms of Attitudes and Appreciations.

1. Believes that keeping clean is an asset.
2. Is willing to budget funds to purchase essential toilet articles.

Experience and Activities at School.

1. Make exhibits of the different kinds of cleansing agents.
2. Make exhibits showing different types of clothing for their age group for various occasions and weather.
3. Survey barber and beauty shops in the community to locate those with Grade A sanitation ratings.
4. Obtain authentic consumer's information concerning radio commercials and other advertisements.
5. Practice bathing the sick, if practical.
6. Practice shampooing and manicuring.
7. Discuss "make-up."
8. Have a fashion show portraying good grooming and appropriate clothing for different occasions.
9. The seventh grade teacher in one school made arrangements for the girls to visit a beauty shop where the beauty operator gave a demonstration and explanation of shampooing. The boys of the same grade had a discussion from a young barber about shampooing and cleanliness. Another school arranged to have the demonstration of shampooing in the school.

The students also learned how to clean and manicure nails. They gave each other manicures. The class arranged an exhibit of articles used in shampooing and one of articles used in manicuring.

Materials.

Posters.

Films.

Samples of cleaning
agents.

Showers.

Handwashing facilities.

Samples of cosmetics and
deodorants.

Towels.

Evaluation.

1. Noticeable changes or improvements in practices and attitudes may show the effectiveness of teaching in this grade.
2. Suitable objective and subjective tests may also be used.
3. Conferences with parents and with individual pupils may help to evaluate how well pupil needs are being met.
4. Opportunities for pupils to talk in class about how much they have learned.
5. Pupils may check individual evaluation sheets.

GRADE 9

There is increased emphasis on factual knowledge in an effort to give a sound background to life long habits and attitudes in healthful living. Teen-agers' interest in inter-personal relationships offers an opportunity to make teaching functional by relating facts to this known interest.

Objectives.

1. To promote cleanliness through the correlation of activities with subject matter.
2. To promote interest in the continuation of health practices developed in earlier grades.
3. To provide time and opportunity for the practices of cleanliness habits.
4. To acquaint the pupil with the responsibility connected with building, maintaining, and safeguarding a healthy body.

Desired Outcomes in Terms of Knowledge and Understanding.

1. Recognizes that to keep clean is an invaluable personal asset.
2. Knows how to clean minor puncture wounds.



Keeps clothes clean and ready to wear

3. Knows how to select and use antiseptics that are best suited for cleaning cuts.
4. Knows the best kinds of cleaning agents to buy for a specific material or purpose.
5. Knows that the body needs special hygienic care.
6. Knows procedures to prevent "athlete's foot."
7. Knows that the best cleansing agents for the skin are soap and water.

Desired Outcomes in Terms of Attitudes and Appreciations.

1. Is cooperative in setting up cleanliness standards for himself and his class.
2. Has great respect for people who are clean and well groomed.
3. Wants to take the responsibility of keeping himself clean.
4. Realizes that expensive clothing is not essential to good grooming.
5. Seeks up-to-date information regarding grooming.

Desired Outcomes in Terms of Habits and Skills.

1. Keeps clothes clean and ready to wear.
2. Keeps body clean and free from offensive odors.

3. Is always attractively and becomingly dressed.
4. Uses cosmetics sensibly and sparingly.
5. Uses only clean grooming accessories—comb, brush, powder puff, etc.
6. Patronizes only “A” grade beauty and barber shops when possible.
7. Refrains from wearing other pupil’s clothing.

Suggested Experiences and Activities.

1. Writing and presenting skits and dialogues, plays and playlets on “The Importance of Keeping Clean” and “How to Keep Clean.”
2. Preparation of exhibits of materials and articles used for personal cleanliness and grooming.
3. Special assignments—such as reports on survey of school and community facilities to promote cleanliness, collection of resource materials, location of “A” grade beauty and barber shops.
4. Class discussion concerning the effects of smoking on the appearance of those who smoke, including such things as stained fingers, stained teeth, ashes on clothing, holes burned in clothing.
5. Demonstrations of how to wash clothes of different fabrics.
6. Making arrangements for speakers—for example, proprietors of beauty or barber shops, agents of cosmetics concerns.
7. A committee might make a leaflet, “What Every High School Pupil Should Know About Grooming.”
8. Work out a check list for grooming and cleanliness practices.
9. Evaluate advertisements of cleaning agents—soap and creams.
10. Discussion of the problems of blackheads and acne.
11. Arrange for individual conference with students on problems of cleanliness and grooming.
12. Pupils in the physical education class should dress in appropriate uniforms and should take showers after class.
13. Pupils should keep gymnasium clothes clean.

Materials.

1. Posters and charts.
2. Reference books (see bibliography).
3. Samples of grading sheets used to grade beauty and barber shops.
4. Films.
5. Individual speakers.
6. Samples of deodorants, soaps, etc.
7. Pails for laundrying demonstrations.
8. Sanitary handwashing and drinking facilities.
9. Samples of antiseptics.
10. Check sheet for evaluation of personal cleanliness.

Evaluation.

1. Observation by teacher of the health practices of the students.
2. Knowledge and attitude tests may be used.
3. Evaluation of his own personal cleanliness and grooming by the pupil.
4. Class discussion about accomplishments of the class in cleanliness and grooming.

GRADES 10-12

Pupils at this grade level should extend their sense of personal responsibility for cleanliness to include their families and others whom they influence.

School facilities should be provided to maintain the stimulus for the practice of personal cleanliness.

Objectives.

1. To improve, maintain and protect the pupil's health through the study and practice of cleanliness.
2. To improve and promote satisfactory habits and attitudes of cleanliness among the students.
3. To promote in the student an awareness of his responsibility for high standards of personal cleanliness for himself, for the family of which he is now a part, and the family he wishes to establish.

Desired Outcomes in Terms of Knowledge and Understanding.

1. Knows that intense and persistent body odors may need the care of a physician.
2. Knows that some parts of the body need more special care than others; for example, mouth, teeth, feet, and armpits.
3. Knows how important it is to keep the skin clean.
4. Has a clear idea of how cleanliness may improve the feeling of well-being.
5. Knows how important it is to keep sick persons clean and knows how to do it.
6. Knows the basic facts relative to the proper care of toe nails, finger nails, hair, etc.
7. Knows something about perfumes and lotions—cost, certain fragrance for certain seasons of the year, perfumes and personality, etc.
8. Knows more about the economy and satisfactory results obtained from cleansing agents other than soap and water—cleansing creams, skin vitamins, etc.
9. Knows that the best way to nourish the skin is through nutrition.

Satisfactory habits of cleanliness





Keep clothes clean and in place

10. Knows that it is not necessary to have expensive soap and creams to keep clean.
11. Realizes that to be clean, both underclothing and top clothing must be clean.
12. Knows cleanliness is the first law of beauty.

Desired Outcomes in Terms of Attitudes and Appreciations.

1. Wants to be attractive.
2. Appreciates a clean and healthy body.
3. Enjoys the practices involved in keeping clean.
4. Appreciates that feeling of security and well-being that personal cleanliness helps one possess.

Desired Outcomes in Terms of Habits and Skills.

1. Understands how to buy and use cleaning articles intelligently and economically.
2. Wears clean clothing including underclothes and socks.
3. Influences others by setting a good example of personal cleanliness.

Suggested Experiences and Activities.

1. Participates in the preparation of improvised bathing and handwashing facilities for home and school when needed.
2. Discussions of personality in clubs or classes.
3. The student has the privilege of bathing after physical education activities.
4. Preparation of personal inventory which includes personal cleanliness practices.
5. The student contacts resource persons and arranges for them to lead discussions on phases of personal cleanliness and grooming.
6. Plans field trips to beauty and barber shops.
7. Prepares exhibits on ways of keeping clean or cleansing agents.
8. Makes exhibits of appropriate clothing for all occasions and weather conditions.
9. Have home nursing project which includes bathing and keeping sick persons clean.
10. Dramatizes experiences that led to better practices of cleanliness and grooming in the home and school.

Materials.

1. Materials for the construction of the improvised bathing and handwashing facilities.

Evaluation.

1. The teacher may evaluate the effectiveness of any instruction through observation of the student's attitudes and practices.
2. Tests are appropriate for this grade level.
3. Pupils should do their own evaluation.
4. Teacher may have individual conferences with pupils to evaluate progress.

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POSTURE EDUCATION INCLUDING CARE OF THE FEET

Posture Education

The way a person carries himself makes a definite impression on others, and the way he uses his body in activities makes a great deal of difference to the person himself.

Good Posture.

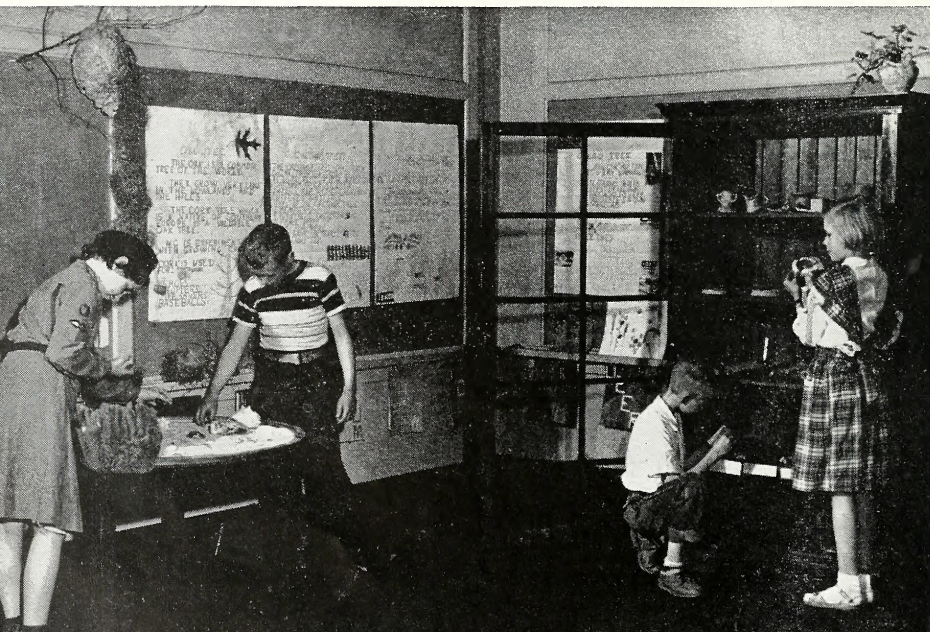
The question "What is good posture?" will need to be answered at least in the mind of the teacher before he can help boys and girls develop good posture and practice good posture habits. The standard is not the same for all boys and girls, for all ages, and at all times. Posture for the 5 year old, for the fast-growing adolescent, and for the military man at attention is not the same. The following may serve as guides to help the teacher formulate a "standard" for posture:

Physical Education in North Carolina Public Schools, page 278, gives the following "Statements regarding posture which may be useful in helping students know what constitutes good posture."

1. Good Standing Posture.

- a. Feet parallel slightly apart, toes point straight ahead.

Examples of good body usage



- b. Weight evenly balanced and placed slightly on outside of feet.
- c. Knees easy, not bent or forced back.
- d. Abdomen held in by contraction of abdominal muscles.
- e. Hip muscles contracted and hips tucked under body.
- f. Shoulders relaxed and down, shoulder blades squeezed slightly together. This brings the chest into normal position.
- g. Head high, chin slightly in with back of neck pushed slightly backward.

2. *Good Sitting Posture.*

- a. (Depends upon the activity while in sitting position.) Sit tall in chair with hips touching back of chair and feet flat on floor.



Good sitting posture

- b. Shoulders relaxed and down with shoulder blades squeezed slightly together.
- c. Neck and head in line with upper back.
- d. When writing, lean forward from the hips maintaining the correct alignment of back, neck and head.

3. *Good Posture in Movement.*

a. WALKING²

Start from hips, swing arms freely but not exaggerated, point toes straight ahead, heels touch floor first. Don't sway

²The Heart of the Home. American Heart Association, 1775 Broadway, New York 19, New York.

hips from side to side and don't lock knees. Good carriage of the neck and head is important.

b. CLIMBING STAIRS.

Keep body erect. Put foot on step and straighten knee to lift body.

c. STOOPING.

Bend at the hips and knees rather than at the waist.

d. LIFTING.

Bend knees and get body underneath object being lifted as much as you can. Lift with leg muscles—not with back.

e. PUSHING.

Lean body from the ankles, brace feet and push against the ground or floor. Use entire body weight.

f. PULLING.

Brace feet, bend knees, round back, grasp object firmly and let body weight do most of the pulling.

g. GOOD LYING POSTURE.

"A good relaxed position of the spine which does not interfere with the internal organs can be maintained with the knees and hips flexed."³ Bed level and firm, not saggy. Pillow low.

h. GOOD GENERAL APPEARANCE.

A well-poised body is indicative of good physical and emotional health and zest for life.

What the Schools Can Do.

The suggestions in this section should help the teacher provide opportunities for boys and girls to:

Learn to use their bodies most efficiently in a variety of daily activities.

Strive to make their bodies as attractive as possible.

Teachers may work to contribute most to positive growth and efficient postures by giving consideration to the following:

1. Every child does not fit into the same "posture pattern." Adult standards for posture should not be set up as the pattern for small children. Individual differences must be considered in posture education, just as much as in other phases of education.

³Turner and McHose, *Effective Living*, 1950, Prentice Hall, New York.

2. The underlying causes of poor posture due to such things as fatigue, infection or discouragement must be removed before posture can be improved to any degree.
3. Good body postures are signs of good health.

Knowledges, Attitudes, and Practices to be developed by the end of public school years.

1. Knows that good nutrition contributes to good posture.
2. Knows and practices good habits of rest and relaxation. (See section on "Rest and Relaxation.")
3. Understands that fatigue may contribute to poor posture habits.
4. Appreciates and uses best lighting facilities or situations available.
5. Appreciates the importance of and strives to develop a well-adjusted personality. Knows that a depressed person often has a "depressed-looking" posture.
6. Adjusts to any physical defect he may have by developing a positive attitude and by learning to compensate for the defect by more efficient use of other parts of the body.
7. Understands that all parts of the body do not grow at the same time, nor at the same rate.
8. Understands that worry may aggravate poor posture.
9. Recognizes the need for professional help to improve posture because of an orthopedic defect, poor body mechanics, or for any other reason.
10. Helps plan and take part in physical education activities to promote good posture. (See Physical Education bulletin.)
11. Knows and appreciates that good foot health contributes to good posture.
12. Understands and appreciates that good posture is important in "getting a job."
13. Wants to and tries to make the most of his potentialities for developing good posture.
14. Understands that posture can be improved, but must be "worked at" constantly.
15. Knows that ill suited furniture may adversely affect posture if improper position is constantly maintained.

16. Understands that poor posture habits often begin to develop during the time when there is some real cause for poor posture, such as:
 - Poor nutrition.
 - Ill-fitting shoes.
 - Fast developing periods of growth.
 - Some physical defect.
17. Knows that good posture is not exactly the same for everyone.
18. Understands that posture is influenced by both heredity and environment.
19. Appreciates the important part that habit plays in good posture.
20. Understands that good posture may have a definite influence on health.
21. Understands that the rate of "normal" growth may influence posture.
22. Knows and practices good care of the feet.
23. Knows that good body alignment is essential to good posture and body mechanics.

Some special posture problems of the adolescent:

1. Girls "grow up" faster than boys.
2. Some girls grow much taller than some other girls of the same age.
3. Some girls mature physically earlier than other girls.
4. All parts of the body do not grow and develop at the same time, nor at the same rate. This may contribute to awkwardness in some youths and cause them to try to detract from this awkwardness with various posture positions.
5. Ill fitting shoes may be caused by fast growing feet, or by girls wanting their feet to look smaller.
6. Worries and fatigue caused by lack of rest and/or excessive activity may contribute to poor posture.

Care of the Feet

"When my feet hurt, I hurt all over." This statement indicates the importance of the feet in relation to general well-being and body usage.

Listed below are a few of the things which need to be considered in teaching about the feet and their care:

1. Correct distribution of weight.
2. Well fitting shoes with adequate support. For example, a lace oxford has good support as opposed to a loafer which has very little support and is not recommended for growing boys and girls.



A lace oxford has good support as opposed to a loafer

3. Daily foot bath with careful and thorough drying between the toes.
4. Well fitting socks or stockings. A stocking with too short a foot size may cause some of the same ills as a shoe that is too short.
5. Clean socks and stockings daily.
6. Shoes with adequate protection for special activities, such as basketball, tennis, hunting.
7. No child with weak feet or with a foot defect should go barefoot without the advice of his physician. Children with healthy feet should not habitually go barefoot on hard pavement; neither should they do vigorous exercise on pavement or other hard surface while barefoot.
8. Frequent causes of painful feet and the effect of painful feet on the disposition of a person and his activities.
9. Causes of corns, calluses, bunions or plantar warts on the feet.
10. Arch supports should be used only at the advice of the physician. When used indiscriminately, they may contribute nothing to help the condition of the natural arch, and may even do harm.
11. Medical advice should be sought for foot defects such as:
 - a. Pronation (ankle rolls toward the inner side of the foot).

- b. Supination (ankle rolls toward the outer side of the foot).
 - c. Flat feet or fallen arches caused by the falling of the bones due to loosening of ligaments and muscles holding these bones.
12. Some orthopedic services are available to most communities. The local health department can provide information as to where the clinics are held and as to what services are provided.
 13. Boys and girls usually get sufficient foot exercises in their "normal" activities of running, jumping, skipping, hopping. However, certain individuals may need special exercises which the orthopedic surgeons may prescribe. These may be taught by the professional physical educator or physical therapist. (See Physical Education bulletin, page 280, for discussion of special foot exercises.)
 14. Ingrowing toenails can usually be prevented by wearing properly fitting shoes and by cutting the toenails properly. The nails should be cut straight across, and the top may be scraped thin or a notch cut in the middle of the toenail at the outer edge.
 15. Causes and ways of preventing athlete's foot.

Examples of Activities

GRADES 1-3

1. Practices standing tall with head up, chin in, shoulders relaxed.
2. Takes part in physical education activities designed especially to promote good posture, such as:
 - Balance beam activities.
 - Hanging from bar.
 - Bean bag on the head, eraser on head, etc.
 - Quick relaxation classroom activities.
 - Creative rhythms.
 - Self testing activities.
 - Story plays which require fundamental movement.
3. Take part in activities for School Posture Week, if one is held.

GRADES 4-6

1. Demonstrate and discuss good sitting and standing posture for work and relaxation.
2. Practice relaxing. Go "limp" with arms. Head on arm on desk. Other arm may "dangle" at side.
3. Take part in physical education activities, especially those which require running, jumping and reaching.
4. Look at pictures of boys and girls who have good posture.

GRADES 7-8

1. Show by illustration or demonstration how the following contribute to posture:
 - Wearing high heels.
 - Reading curled up in chair.
 - Carrying heavy books or other object always with same arm.
2. Groups within the class may work on these problems:
 - How do tired muscles affect posture?
 - Why don't we all grow at the same rate?
 - In what way does posture affect our total health?
3. Discuss occupations which may adversely affect the posture of a person.
4. Demonstrate good posture while standing, sitting, walking, lifting, climbing stairs.
5. Estimate the number of hours a day a person spends on his feet in different kinds of jobs.
6. Girls and boys may want to study footprints of their own feet. Footprints may be made by:
 - Stepping in flour or powder and then onto a dark colored construction paper.
 - Walking on firm sand along the beach.
 - Walking across the floor with wet feet.
7. Dolls cut out of cardboard with jointed limbs may be used to demonstrate postures.
8. Pictures may be made of members of the class when they are not aware of it. Each member may then evaluate his own posture. The teacher should encourage students to ask for help in improving posture where there is a need.

9. Participate in the planned physical education program which includes a broad variety of activities, such as:

Team games.

Self testing activities.

Individual sports.

Stunts and tumbling.

Rhythms.

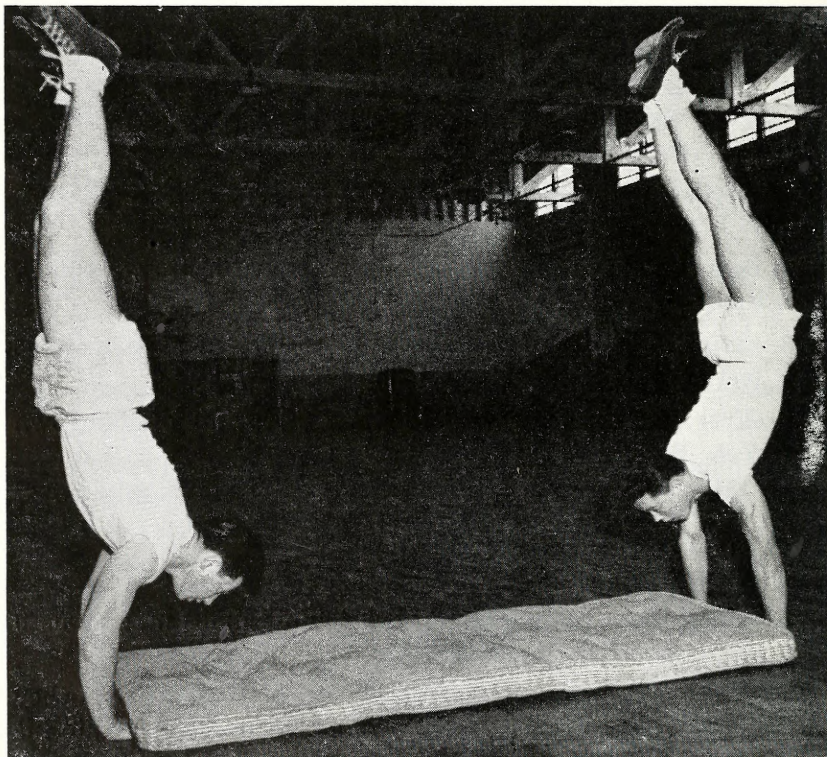
GRADE 9

1. Discuss how correct posture develops gracefulness and appearance in both boys and girls.
2. Display pictures showing examples of poor posture.
3. Illustrate by cartoon-style diagram:

How a person who missed his breakfast felt by 11 A. M.

The way a person who got only 4 hours sleep may feel by 3:30 next day.

The way a person may feel when all the rest of the gang are going swimming but didn't ask him.



Physical education activities help in improving posture

4. Pupil may evaluate his own posture by the use of a full length mirror.
5. Committee of pupils may interview local orthopedic physician to get his advice about going barefoot under different kinds of conditions.
6. Participate in physical education activities to improve posture.
7. Discuss the findings of the physical examination with the student and make plans for the improvement.
8. Make a study of body types.
9. Suggest and act out how students manage their bodies—walking across the stage, going up and down steps, getting off and on bus, meeting the public as a student clerk, wearing a new “formal” suit of clothes, asking a girl to dance.
10. Make posture silhouettes.

GRADES 10-12

Many boys and girls in high school need help in improving posture. Opportunities for study and action may be provided in the following:

PHYSICAL EDUCATION (Where a course is offered above 9th grade).

1. Stunts and tumbling.
2. Individual sports.
3. Adequate rest and relaxation.

HOME ECONOMICS.

1. Modeling clothes.
2. Grooming.
3. Efficiency and safety in doing household tasks.
4. Dress design in relation to body types and postures.

GUIDANCE.

1. Secure help from counselor in pointing out the need for changing posture to make the best appearance when applying for a job.
2. Help in recognizing the underlying cause for poor posture.

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CANCER EDUCATION

In a recent survey of health interests of high school boys and girls, cancer was listed near the top of the list. In the 1948 edition of *Health Education*,¹ cancer was listed as one of the twelve big health problems. The high death rate from cancer points out that some emphasis should be given to the study of cancer in the health education program.

In this area, just as in many other specialized areas, most of the teaching about cancer in the elementary school should be good general health practices with emphasis on:

Good *medical care*—health examinations and other health supervision by the family physician and dentist.

Seeking help when there are signs of deviation from normal conditions.

Developing good attitudes toward professional medical personnel.

Understanding something about the nature of normal cell growth.

Problems of individual children and their questions will make it important to teach about cancer in the elementary grades at times, but there should be very little specific cancer teaching in grades 1-6.

GRADES 7-8

Suggested Topics.

1. Madam Curie and her work in radium.
2. Study of the X-ray and treatment of cancer as one of its uses.
3. Community resources for treatment of cancer patients. (See "Community Health.")
4. Comparison of death rate from cancer with the rate for other diseases including poliomyelitis and tuberculosis.
5. Dangers of fake cures for cancer.
6. Selection of the most reliable medical aid.
7. Extent and importance of cancer research carried on in State and Nation.

¹Health Education, American Medical Association and National Education Association, 1201 Sixteenth Street, Washington, D. C.

GRADE 9

The 9th grade may want to study cancer during the Spring of the year when the American Cancer Society (North Carolina Division) has its annual "Cancer Crusade." There is more interest in cancer education in the community at that time. However, this does not imply that students should do the fund raising.

Suggested Topics and Activities.

1. The cancer problem in North Carolina—how many cases—how many deaths, etc.
2. Tumors—benign ; malignant.
3. The work of the North Carolina Division of the American Cancer Society in your county (with the money raised in your county).
4. The treatment for cancer—
 - a. X-ray.
 - b. Radium.
 - c. Surgery.
 - d. Other recent developments including the use of radio active isotopes.
5. Signs and symptoms of cancer.
6. The nature of the disease of cancer—normal cell growth and what happens in cancerous growth.
7. Recent research and developments in cancer.
8. Things that individuals can do to help prevent cancer.
9. The relationship of smoking to cancer of the lung.
10. The relationship of pipe smoking, if any, to cancer of the lip.

Individual pupils who have a special interest in some phase of cancer education should be encouraged to do more extensive and intensive study on that phase.

GRADES 10, 11 AND 12

There will be many opportunities for more study of cancer in the various subject matter classes, for example:

IN BIOLOGY.

1. Normal cell development.
2. Growth of abnormal cells.
3. Factors that contribute to the incidence of cancer.
4. The effect of nicotine on the cells of an immature person and those of an adult.

IN HOME ECONOMICS.

1. Home care of the sick, including those who have cancer.
2. Diets for the inactive person and for the bedridden.
3. Home making, including the adjustment of the individual to severe illness and family acceptance of illness on the part of any member of the family.
4. Making bandages for cancer patients.
5. Self examination of breast for lumps that may or may not be cancer.
6. The effect of smoking on pregnant women.

IN SOCIOLOGY.

1. The importance of adequate medical service to discover early signs of cancer including periodic medical examination, cancer detection and diagnostic clinics, treatment, and custodial care.
2. The present attitude of society towards cancer patients compared to that of 25 to 50 years ago.
3. Responsibility of society for cancer education programs.
4. The individual's responsibility for protecting and taking care of himself in-so-far as possible.
5. Responsibility of society for the care and treatment of cancer patients who cannot pay for medical and hospital service.
6. Effect of cancer on the life of a community.

IN MATHEMATICS.

1. Study of the leading causes of death in the State and Nation.
2. Draw diagrams showing comparative deaths from cancer with other causes.
3. Study cost for X-ray, surgery, radium and hospital isolation.

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Cancer—A Manual for High School Teachers. New York Cancer Committee.

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SOURCES:

1. American Cancer Society, North Carolina Division, Mt. Airy, N. C.
2. North Carolina State Board of Health, Raleigh, N. C.
3. American Medical Association, 535 N. Dearborn Street, Chicago 10, Illinois.
4. Metropolitan Life Insurance Company, New York.

FIRST AID

Every child and adult needs to have as much information about first aid as is practical, to know what to do in case of an emergency. Where large numbers of people are injured, there will be special rescue and first aid problems. Floods, fires, atomic explosions, etc., may create unusual hazards and problems. Plans should be made to meet them. First aid instruction *is needed* and should be included *as a part* of the health education program, but it should not exclude or replace other essentials.

Suggested Experiences.

Listed below are first aid practices every pupil should know about for normal living in modern times. Each teacher should study *all materials* for grades below one being taught before making plans for teaching. Review these materials with students where necessary.

GRADES 1-3

A. *Information every child should know.*

1. His complete name and age.
2. His telephone number (if he has one) and how to call that number.
3. His residence (location in rural areas and street and house number in city).
4. His parents' names.
5. Where his parents work.
6. His family physician's name.
7. Who to call and how to call in case of emergency.
 - a. The physician.
 - b. The policeman.
 - c. His aunt, grandmother, neighbor.
 - d. The fire department.
8. The air raid signal and what to do.
9. To always notify an adult when injured.

CHILDREN WILL NEED TO HAVE A LOT OF HELP TO DEVELOP AN ATTITUDE OF ALWAYS TELLING THE PARENT, TEACHER, OR OTHER ADULT WHEN THEY GET HURT WHILE DOING SOMETHING THE PARENT

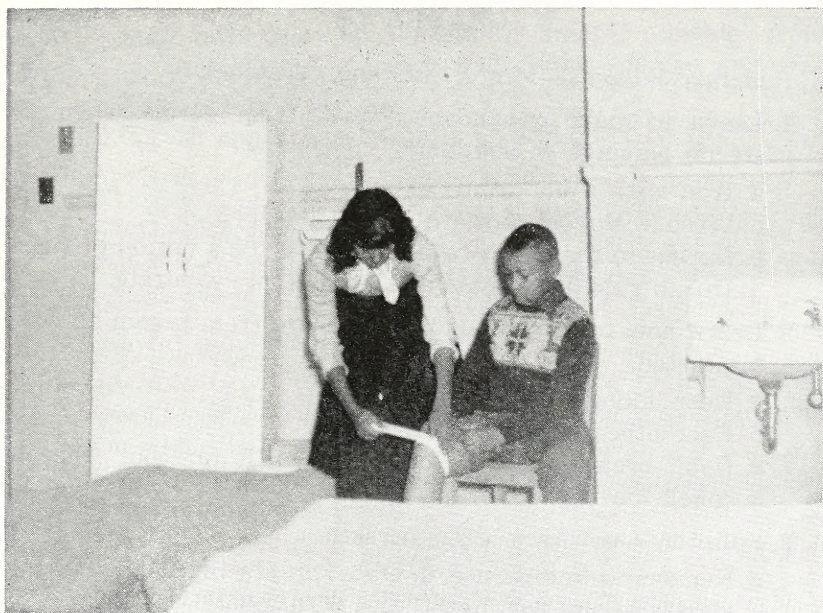
TOLD THEM NOT TO DO. THEY SOMETIMES FEAR A SCOLDING OR PUNISHMENT BY THE PARENT MORE THAN THEY FEAR INFECTION FROM THE WOUND.

B. *Minor Cuts and Scratches* (In case of puncture wounds where there is not severe bleeding) :

1. Notify an older child or adult. (Parent or older relative at home, or teacher when at school.)
2. When no adult is present, wash thoroughly with boiled water. Let dry in air. Cover with sterile bandage. Do not apply adhesive tape directly over open wound and do not apply cotton.

C. *Fire*.

1. Minor Burns (when skin is not broken).
 - a. Apply cold water to ease pain. (Do not apply heat.)
 - b. Tell adult (teacher or parent).
 - c. Apply burn ointment (plain vaseline or boric acid ointment).
 - d. In case of blister, do not break blister.
 - e. For *chemical burns*, wash generously with clean water and apply burn ointment if skin is only reddened.
 - f. For *sunburn*, apply a burn ointment if skin is reddened. If blistered cover with sterile gauze until advice of physician is secured.
2. When clothing catches fire.
 - a. *Indoors*—Roll in blanket, rug, big towel, etc., to smother fire. *Do not run. Call for help.*
 - b. *Out-of-doors*. Roll over on ground, in ditch, in sand, etc. *Do not run. Call for help.*
3. When building catches fire.
 - a. Get out of building the nearest safe way.
 - b. Call adults.
 - c. Call fire department. Learn the correct way to report a fire in your town or neighborhood. Talk over with your parents what should be done in case of fire in rural areas.
 - How to report it and to whom.
 - What to do.
 - What materials should be kept on hand. (See pp. 330-331 for first aid supplies.)



Administering first aid to a minor wound

D. *Poisons.*

In emergencies or when households are upset, the younger children may have more access to “poisonous medicines, cleaning fluids, etc.” In case any child thinks or knows he has eaten or drunk the “wrong material,” he should notify the parent or other adult *immediately*.

Of course, all poisons should be kept out of reach of small children at all times.

E. *Bites.*

1. Dog bite—Wash the wound with water. Report to teacher at school or to parent or other adult when not at school. Be able to identify dog if possible.
2. Snake bites—Call for help at once.
3. Tick and insect bites. Report to teacher or parent.

F. *Serious Injuries.* In case of serious injuries of any kind to playmate or others (to leg, to arm, fainting, etc.), call an adult at once. *Don't do anything to the injured person*, except help keep him still and quiet.

GRADES 4-6

A. *Puncture Wounds*—Minor Cuts and Scratches.

1. Learn to make a bandage "free" from germs when no sterile bandage is available.
 - a. Iron with a hot iron.
 - b. Wash with soap and water and let dry.
 - c. Expose to the direct rays of the sun for a period of time.
 - d. Dip in rubbing alcohol and let alcohol evaporate.
2. Learn how to keep wound or bandage from becoming contaminated.
 - a. Keep fingers off.
 - b. Keep other exposed articles away.
 - c. Don't breathe on it. Don't blow on it to "cool" the alcohol you put on it.
3. Splinters—not very deep in skin.
 - a. Remove splinter—use tweezer or sterilized needle (to sterilize hold over fire or dip in alcohol).
 - b. Press wound gently to cause a little bleeding.
 - c. Wash wound with soap and water.
4. Apply antiseptic. Cover with clean bandage.

B. *Fire and Burns*.

1. Always call adult.
2. Learn how to put out small fires in home or yard.
 - a. Grease fire—quick action—smother with lid or salt.
 - b. Wood fire—water it.
 - c. Electric fire—Dry hand if wet, cut off electricity and smother fire.
 - d. Grass or leaves in the yard or on the farm—beat out with brush if small fire; run for help if large fire.

C. *Poisons*.

1. *Except for poisoning by lye or acid*, try to get patient to vomit. Drink water with two teaspoons of soda to each glass, or use soapy water, warm milk, even dishwater, milk and egg mixture or stick finger down throat.
2. Call the doctor for any poisoning.
3. Poison ivy, oak, or sumac.
 - a. When you have been in contact with them, take a thor-

ough bath, using strong laundry soap if possible. Apply rubbing alcohol. Change underwear, change and wash outer clothing.

b. If rash appears, see family physician.

D. Bites.

1. Insect bites—remove sting if it is still in the skin. Wash with ammonia water or apply a thick paste of baking soda.

E. Fractures.

1. Call for adult help immediately.
2. *Do Not Move Patient*, unless fracture is in the arm and doesn't seem to be too bad. However, cases may occur when you would have to rely upon yourself so—
 - a. Learn to apply simple splints.
 - b. Get patient comfortable.

F. Nosebleed.

1. Sit up and tilt head slightly back.
2. Press nostrils together.
3. Wet towel or large cloth with cold water and apply it to face over nose.
4. Keep quiet.

Note to teacher. Persistent nosebleed for no apparent reason may indicate rheumatic fever. Refer to family physician or nurse who serves your school.

G. Pimple on Face.

1. Let it alone.
2. May apply a little rubbing alcohol to help dry it up.
3. *Never squeeze it.*

H. Cinder or Other Object in Eye.

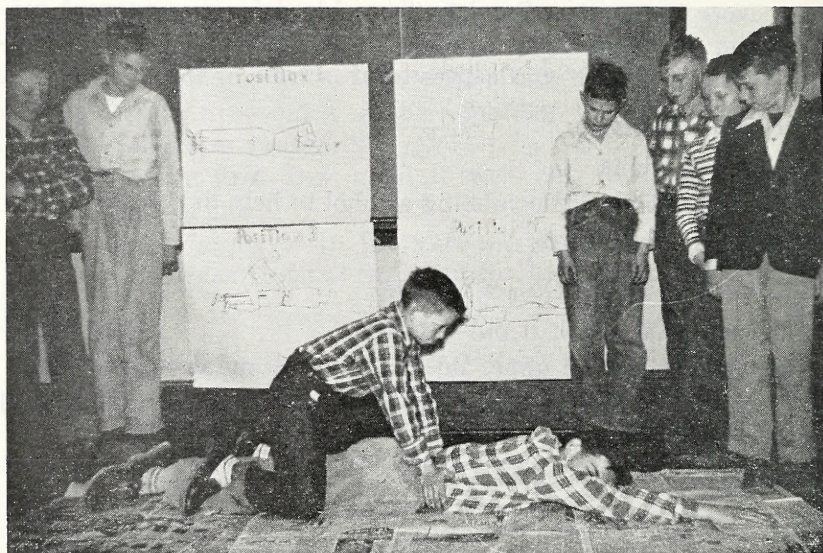
1. Tears may wash it out—so cry.
2. Grasp lashes of upper lid and pull out and downward.
3. Use eyeglass and wash with water that has been boiled and cooled.
4. *Do not rub the eye.*

I. Artificial Respiration.

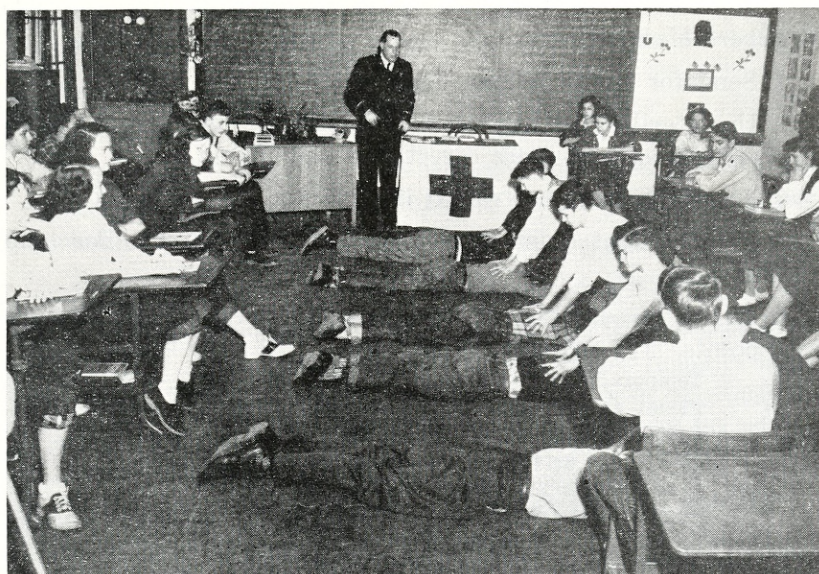
1. To be applied when condition may have been caused by
 - a. Being under water.

- b. Electric shock.
 - c. Suffocated under bedding, earth, or in a poorly ventilated place.
 - d. Carbon monoxide gas (car or other motor).
 - e. Choking on food or other object.
2. Back pressure—arm lift method.
- a. Place victim on stomach—his chest on his hands.
 - b. Kneel at his head looking toward his feet, place hands on back with heel of hand on imaginary line between arm-pits. Thumbs touching.
 - c. Elbows straight. Rock forward until arms are vertical increasing pressure gradually.
 - d. Slide hands out to patient's arms just above the elbow. Rock back slowly and raise his arms until tension and resistance are felt. Drop arms to complete the cycle. Repeat cycle about 12 times per minute.

Note: The prone pressure method has been used for years before the Back Pressure method was developed. It is still an acceptable method for artificial respiration. However, back pressure-arm lift being a two phase operation is considered best.



Demonstrating artificial respiration showing the back pressure—arm lift—push and pull method (new method)



Back pressure—push



Arm lift—pull

GRADES 7-8

A. *Severe bleeding.*

1. Send for the physician first.
2. Use sterile dressing when available, or use bare hand in emergency and press directly on the wound.
3. Keep bleeding part raised if possible.
4. Keep patient quiet and warm until doctor or other help arrives.
5. Where bleeding is too severe, apply pressure at pressure points. The pressure points are:
 - Temporal artery (in front of ear).
 - Facial artery (on jaw).
 - Carotid artery (in neck).
 - Subclavian artery (behind collar bone).
 - Brachial artery (inner side of upper arm).
 - Femoral artery (in groin).

B. *Rescue from electric shock, fallen buildings, etc.*

1. Never touch victim or wire. Push wire free from body with a dry stick or board.
2. Call an adult whenever possible.
3. When no adult is near, shut off electric current at the main switch or use a dry thick cloth or towel to pull the cord from the socket. In case of bathroom shock, call help if possible because of so many "grounded" objects in the room.
4. Out-of-doors, *call help if possible* or use a *long dry wood pole* or long dry cloth to remove victim.

C. *Fainting.*

1. When feeling faint bend down so that head is between knees or lie down.
2. To help person who has fainted, keep him lying down, loosen collar or other clothing. When he recovers sufficiently, a drink of tea or coffee may help revive him. If he does not recover in a very short time, consult a physician.

D. *To rescue person about to drown.*

1. Encourage person to kick and not get excited.
2. Get a stick and hold out for person to catch.

3. Toss him a rope, "life saver" or anything that will float.
4. Don't swim out to him unless you have passed life-saving tests.

E. *Stomach Ache.*

Don't "take" anything into the stomach until it is determined what is wrong. A stomach ache is usually a warning signal.

F. *Committee Assistance to the Administrator (principal).*

1. To help secure first aid kits (see p. 367 of this publication) for each classroom. These pupil committees (usually high school or upper grade) under the guidance of the teacher may work out a list of simple directions for each kit where the classroom teacher wishes.
2. To inspect these kits periodically (*about once a month*) to be sure that supplies are on hand and in order. This could be done by the same committee which helped to secure them or it could be done by other committees. One of the purposes of such an inspection would be to report any items which need replenishing.

G. *Information to family about First Aid Supplies.*

1. Each family needs to be informed about first aid supplies needed in each home, in car, etc. The supplies listed on p. 367 should be helpful in selecting contents for the first aid kit at home.
2. Where a family is in a disaster area (flood, storm, atomic attack, etc.), certain emergency supplies should be on hand including sheets, towels, safety pins, scissors, flash light, blankets, etc. See Civil Defense Authorities for specific lists.

Important Note—When more detailed information about certain phases of first aid is needed, help can be found in recognized publications. (See list at end of this section). For example, some groups will need more information on water safety than is outlined in this publication. Some groups will need more information on athletic injuries than is outlined here. Home economics groups will study care of injuries in their home nursing and cooking courses. The athletic teams will study athletic injuries. Much more in-

formation will be needed by the high school student about transporting an injured person than is suggested here.

The general suggestion for teaching first aid is to include it as a part of health instruction. However, many groups may feel the need for a unit or course in first aid in the junior or senior high school. Care should be taken to see that only those things really needed are included. The pupil should not have to "take" things again which he already knows just to satisfy a "time" requirement for a first aid certificate.

HIGH SCHOOL

(See Important Note in Grades 7-8.)

A. *Emergency care for large number of victims.*

1. Discuss relative priority of care where large numbers are injured. (Consult the medical care committee for Civil Defense.)
2. Discuss types of injuries to expect in these emergencies and what to do for each.

B. *Shock.*

Since every injured person is potentially a person in shock, every precaution should be taken to prevent the victim from going into a state of shock. These precautions may prevent shock:

1. Extreme care in transporting the injured person.
2. Stop loss of blood immediately if possible.
3. Keep patient warm. Exposure to cold increases severity of shock. (Too much heat may be dangerous.) Check and double check hot water bottles, electric pads, etc.
4. Keep patient lying down or raise his feet 12 to 19 inches.
5. Give fluids (water, hot tea, coffee, milk, or broth) if tolerated. If patient is to reach hospital soon or if there is nausea, don't give fluids or liquids. Don't use stimulants.
6. Keep patient as quiet, comfortable and reassured as possible.

C. *Dislocations* (bone out of place at joint).

Except in certain emergencies, no one except the physician should put the dislocation back in place.

D. *Sprains* (injuries to ligaments at joints).

1. Send for help if possible.
2. Do not attempt to walk until seen by physician.
3. Elevate the injured part. (Sling for arm or leg on pillow with patient lying down.)
4. Apply *cold* (ice bags, put under cold water tap, etc.)
5. The compression or elastic bandage may be used advantageously.
6. If severe, don't use injured part until seen by a physician.
7. Where person is alone when ankle is injured, use ankle bandages over shoe to aid in walking for help.

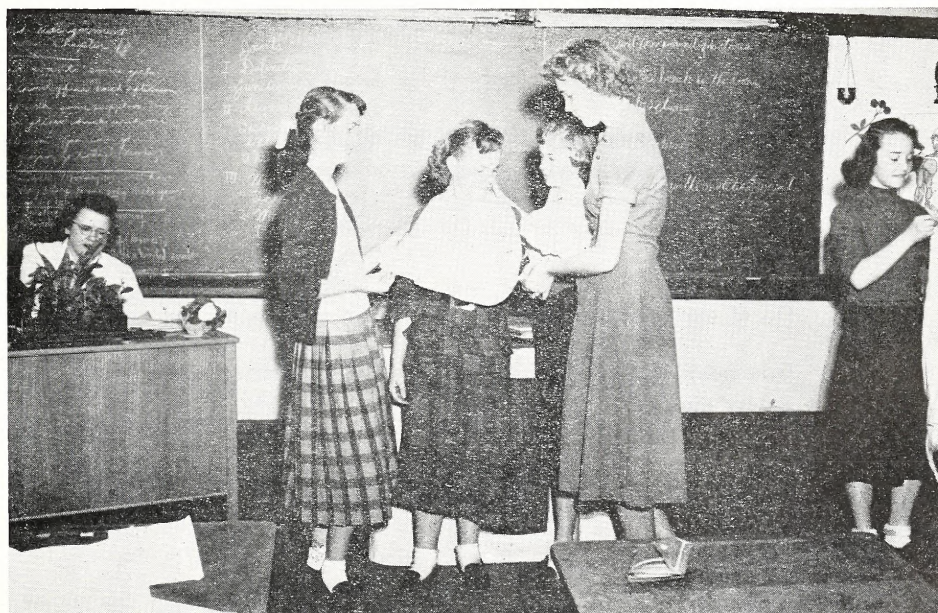
E. *Strains* (injury to muscle or tendon due to excessive use).

1. Rest the injured part.
2. Apply heat after danger of hemorrhaging.
3. Massage—upward always—go very lightly over injured area.

F. *Bruises*.

No first aid needed usually. To prevent discoloration apply *cold* applications *immediately*.

Learning first aid procedures through practice in pupil groups



First Aid Supplies

A. *For the Health Room.*

First Aid supplies should be on hand in the health room or at some other appropriate place in each school.

The list below is from the "Report of the Third National Conference on Physicians and Schools"¹ and was adapted by that conference from a list published by the American Medical Association:

SUGGESTED SUPPLIES	WHAT THEY ARE FOR
Tincture of green soap.	Washing injured parts.
Hospital cotton, roll.	Large soft pads or dressings.
Absorbent cotton, sterilized, roll, box or "picking" package.	Swabs or pledgets for applying medications or wiping wounds.
Dressings, small pads, sterilized, in individual transparent envelopes.	For protecting injuries.
Dressings, finger, in envelopes.	For protecting very small injuries.
Adhesive tape, roll, one inch.	Fastening dressings or splints.
Scissors, bandage or blunt.	Cutting dressings.
Toothpicks.	For making swabs.
Alcohol, 70% (water 30%) or rubbing alcohol.	Disinfecting skin and minor wounds.
Mineral oil, bottle of petroleum jelly, tube or jar, white or yellow, but not medicated.	For removing ointments; in eye to relieve irritation from foreign body; for burns if no other ointment is at hand.
Burn ointment U.S.P. (Boric Acid Ointment).	For very small minor first degree burns only.
Hot water bottle with cover.	Local relief of pain.
Ice bag.	Local relief of pain.
Tourniquet (three feet of soft rubber tubing and a stick or pencil).	Use above place from where red blood spurts. Call doctor at once. Release every 15 minutes to allow circulation to reach parts, then reapply.
Eye droppers.	Cleanse after using and boil before using.
Oil of cloves—rural areas.	For tooth ache, but only until child can get to dentist.
Graduated medicine glass.	For measuring liquids.
Safety pins.	

¹"Report of the Third National Conference on Physicians and Schools", American Medical Association, 535 N. Dearborn St., Chicago, Ill.



The public health nurse talks with children about first aid materials

As you notice there is no *aspirin* listed or any other drugs for internal use. When pupils think they need aspirin, the cause should be investigated and removed if possible. This usually requires the services of the physician.

Every faculty member needs to know where the first aid supplies are kept and who is to administer them. It is generally recommended that there be *at least one person* trained in first aid on each faculty.

B. For the Classroom.

In addition to the first aid supplies in the health room or some other central place, each classroom should have a first aid kit for use in minor accidents. A kit for the classroom might include the following items:

- 1-inch adhesive dressing.
- Some medium sized sterile gauze dressing.
- Burn ointment or vaseline.
- Antiseptic (rubbing alcohol or other).
- Triangular bandage.
- Package of sterile cotton.
- Scissors.

REFERENCES

- A. From the American Red Cross, Washington, D. C. (or your local or regional Chapter).
1. First Aid Textbook for Juniors.
 2. Instructor's Manual for the Junior Course.
 3. First Aid Textbook (Standard Course).
 4. Instructor's Manual for the Standard and Advanced Courses.
 5. Swimming and Diving Textbook.
 6. Instructor's Manual for Swimming and Diving.
 7. Life Saving and Water Safety.
 8. Instructor's Manual for Life Saving and Water Safety.
- B. Mueller and Robertson. *Fundamentals of Health and Safety*. 1948. D. Van Nostrand Company, New York. pp. 25-29, 70-73, 91-97, 145-147, 161, 189-193, 237-240, 257-264.
- C. *First Aid*. Metropolitan Life Insurance Company, 1 Madison Avenue, New York.
- D. *When the Unexpected Happens*. John Hancock Life Insurance Company, Boston, Mass.
- E. References on athletic injuries:
1. Cramer and Broughton. *A Training Room Manual*. Lowe and Campbell Athletic Goods Company, Charlotte, N. C.
 2. Cramer. *First Aid Digest*. Lowe and Campbell Athletic Goods Company, Charlotte, North Carolina. 1952.
 3. Thorndyke. *Athletic Injuries*. Lee and Febiger, Philadelphia, Pennsylvania. 1948.
- F. BOOKLETS:
1. *Who is Liable for Pupil Injuries?* National Education Association, 1201 Sixteenth Street, N.W., Washington, D. C. 1950.
 2. *The Physical Educator Asks About Health*. American Association for Health, Physical Education and Recreation, 1201 Sixteenth Street, N.W., Washington, D. C.

SAFETY EDUCATION

The safety education program in the schools should aim to develop safety knowledge, habits, attitudes and skills in order to eliminate, as far as possible, the dangers of accidental death or injury to children, to educate the adults of the future as to their responsibilities for the safety of the individual and the community, and to give each individual freedom to enjoy the adventures of life in a relatively safe condition and manner. To achieve this aim, each individual should accept his share of the responsibility for his own safety, for that of his family and for his community. This involves not only *learning* safety practices but also *giving attention* to safe surroundings and safe practices at all times and in all activities—not just at school or at work.

Safety instruction and guidance should help boys and girls carry on their everyday experiences in a relatively safe manner, thereby increasing their chances of living a full and adventure-some life. There are elements of risk in practically every phase of modern living. These, however, should be minimized as much as possible. When the risk in an activity is out of proportion to its inherent value, the activity should be avoided.

Safety teaching should take into consideration the fact that many safety problems are too big for the individual to solve, and for that reason such problems become a responsibility of the community.

THE PROBLEM

Vital statistics show that the accident problem is a big one. It is the leading cause of death in the 1-24 age group and ranking with the ten leading causes of death in all other age groups. When the great number of temporary and permanent injuries, loss of time from work, property damages, and other results are included, the problem then becomes even greater. In the school-age group in North Carolina, motor vehicle accidents rank No. 1 among the leading causes of death with "all other accidents" ranking as the No. 2 cause of death¹.

Although the accident problem still is a major one, accidental death rates have declined substantially for the elementary school age child. In fact, the rate now is about one-half of what it was

¹Annual Report of the Public Health Statistics Section Part 2: Live Births, Still Births, Deaths and Population, 1950. North Carolina State Board of Health, Raleigh.

in the 1920s. However, the same progress cannot be found in the high school age group. The death rates for high school age group are about the same as they were in the 1920s and about twice as high as those of the elementary age group.² One of the reasons for the decline in the rates in the elementary school is the increased emphasis on teaching safety practices in the elementary schools.

The effect of safety education and safety protection can be clearly seen in certain industries which can show a very definite trend downward in the death rates from accidents after instituting safety education programs for their employees.

There is one or more causes for every accident. Most accidents can be prevented—some of them by removing environmental hazards; while others can be prevented by the development of good safety knowledge, attitudes, and practices.

THE SCHOOL'S RESPONSIBILITY FOR SAFETY AND SAFETY EDUCATION

In the sections of this bulletin on "Organization and Administration" and "Healthful School Living," the duties and responsibilities with respect to the total health program are discussed. Specific duties and responsibilities in the safety education program may be stated as follows:

1. To provide safe and efficient school plant and school transportation facilities.
2. To see that school bus drivers get adequate safety instruction, as well as the required medical examination.
3. To consider the safety factor in all phases of the total school program.
4. To provide opportunities for boys and girls to acquire knowledge, establish desirable attitudes and appreciations, to develop habits and skills, and to apply these in such a way as will lead to intelligent, safe living.

Instruction in safety is usually considered as an area of health instruction and should receive emphasis in relation to the needs of the boys and girls and the local community. Safety may be taught as a special unit at times, but must be considered by

²Adapted from *Accident Facts*, National Safety Council, 425 N. Michigan Avenue, Chicago, Illinois.

all teachers as a part of all phases of the program whenever the opportunity arises.

A complete and well-rounded program of safety education must recognize the importance of safety in every phase of activity in which there are hazards, including the following:

1. Travel safety.
2. Home and farm safety.
3. School safety.
4. Work safety.
5. Safety in recreation and sports.
6. Fire prevention and protection.
7. First aid. (See section on "First Aid")

Driver education should be offered at about the time students reach legal driving age. A revision of the manual giving specific suggestions for conducting driver education in the school will be issued by the State Department of Public Instruction sometime in the near future.

Listed below are suggested Outcomes and Activities which the teacher may use in planning and carrying on the safety education program to help meet the needs of the boys and girls. As in all areas of learning, it is important for the teacher to consider the previous experiences of boys and girls and those experiences planned for them in the future to prevent omission or too much duplication.

GRADES 1-3

Desired Outcomes in Terms of Knowledge, Attitudes and Practices.

1. Understands that safety rules and regulations are necessary.
2. Knows our "friends" or community citizens who help keep us safe, including parent, policeman, bus driver, teacher, physician, janitor, safety patrolman and fireman.
3. Recognizes hazardous conditions and places to avoid when playing.
4. Knows how and where to walk and play safely.
5. Knows how to safely use play equipment, including tricycles, scooters, pedal cars, skates, etc.
6. Knows how to care for and store toys and play equipment in designated places.

7. Understands and appreciates traffic signals, warning signs, etc.
8. Knows how to use permanent play equipment on recreation areas, such as jungle gym, horizontal bars, etc. (Slides, swings, giant strides and see-saws are not recommended for school use.)
9. Knows and practices safe procedures in school corridors, at drinking fountains, in toilets, on stairways, on the playground, etc., and understands the importance of taking turns in these places.
10. Knows rules for water safety, in accordance with his needs, including swimming, boating and fishing.
11. Knows and understands that matches, lighted candles, etc., are to be handled only under the supervision of an adult. (See section of "First Aid")
12. Knows and practices safe ways of getting on, riding and getting off school buses or public conveyances.
13. Understands that the weather affects safety.
14. Uses good safety practices with pets and other animals.
15. Knows how to handle sharp edged and sharp pointed instruments.
16. Knows how to handle correctly objects he works with; for example, lifting, carrying, or moving objects, such as chairs, etc.

Suggested Experiences and Activities.

1. Talk over some of the safety rules necessary at school and in going to and from school.
2. Use the traffic signals and lights near the school or make traffic signals and lights for use in learning to identify them and their meaning. (This may be applicable only in first grade or beginning of second grade.) Talk about other highway signs.
3. While school bus is parked on school grounds, practice getting on and off bus, being seated in relation to the location they live on the route, getting off the bus and crossing the road or street after leaving the bus. Discuss getting in and out of a car or other vehicle only when it is not moving. Learn the importance of leaving car door closed when car is moving.

4. Learn the fire drill signals. First grades should practice fire drills several times before a fire drill for the entire school is expected to occur.
5. Take about some of the people who help us live safely. One or more of these may visit with the pupils and explain some of the safety practices. For example, the policeman, who directs traffic, may meet the class at the street corner crossing and show them how and when to cross the street. The bus driver may show the boys and girls where to wait for the bus, how to get on the bus, the way to take their seats, how to act while on the bus, how to get off the bus, and how to cross the street or road.
6. Discuss the safe places to walk around the school property and on the way to and from school. Take a walk along one or more of these places to learn where they are and how to walk along them. This may be done during a field trip.
7. Visit the places on the school grounds where boys and girls of this group will be expected to play. Talk about the reasons these pupils will play in these areas.
8. Read stories and talk about safe places to play at home or in the neighborhood—and places not safe, such as the street, highway, railroad, near the stove, near unprotected water, in pastures with animals, etc.
9. Practice safety in all games and sports, including use of balls, bats, jump ropes, tumbling mats, etc. (See Physical Education in North Carolina Public Schools.
10. Arrange for some pupils to bring tricycles, scooters or other play equipment to school. Have demonstrations of how to use these in a safe manner.
11. Learn to put toys and other play things in their proper places at school after every use. During discussion period, talk about how to put toys away at home to keep others from falling over them.
12. If slides, swings or other types of permanent equipment are to be used by pupils, learn how to play on them safely by receiving instruction and demonstrations, from the teacher, in accordance with their needs.
13. Discuss and demonstrate safe practices at the drinking fountain, in the toilet room, in the lunchroom, in the halls, etc.

14. Discuss water safety, including swimming practices, places to swim, times to swim, with whom to go, etc. Discuss also fishing and boating.
15. Read and tell stories, give demonstrations, and discuss safety practices while walking in the rain or when sleet is on the ground, while carrying an umbrella, when wearing boots or galoshes, etc.
16. Discuss pets and how to handle them or play safely with them. Some pets may be brought into the classroom for observation and demonstration. Talk about the importance of avoiding stray dogs or other strange animals.
17. Demonstrate the handling of sharp objects, such as scissors or knives. Practice passing these objects from one person to another in a safe manner, with the handle toward the person to receive them.
18. Practice taking turns at the drinking fountain, in the lunch-room, etc.
19. Practice good housekeeping in the school.
20. Have demonstrations showing lifting or carrying objects, such as chairs.
21. Keep a class record of all accidents which happen to the class members. Have each member always report accidents so records can be accurate and up-to-date.

Evaluation.

1. Review the accident record of class members to determine progress.
2. Observe safety practices of pupils to note improvement.
3. Talk with parents, older brothers or sisters of class members, other teachers, bus drivers, and others about the safety practices of these boys and girls when they are not under direct supervision of the teacher.

> GRADES 4-6

Desired Outcomes in Terms of Knowledge, Attitudes and Practices.

1. Reviews suggestions for grades 1-3.
2. Learns safety rules to meet needs and understands why they are necessary.

3. Appreciates the work of persons who have official responsibility for carrying out safety programs, including school personnel, policeman, highway patrolman, junior safety patrol, etc.
4. Increases knowledge of safe places to travel and play.
5. Plays in the safer places he knows.
6. Knows how to use and care for play equipment, including bicycles, skates, other sports equipment, etc.
7. Stores play equipment in proper place after use.
8. Likes to have a clean and safe environment.
9. Knows traffic signals and regulations appropriate to his needs and follows them.
10. Moves about the school buildings and elsewhere in a safe and courteous manner.
11. Observes safety precautions while participating in physical education activities.
12. Knows and practices safety measures for water sports.
13. Understands practices necessary for safety at home or on the farm.
14. Knows and practices safety precautions for use in public transportation, such as buses, taxis, etc.
15. Understands something of the safety hazards connected with the improper use of matches, B. B. guns, dynamite caps, hot stoves, etc.
16. Uses sharp instruments correctly.
17. Understands in an elementary way the importance of the human element in accidents.
18. Knows safety practices for participating in a field trip, a picnic or a camping trip.

Suggested Experiences and Activities.

1. Activities and experiences suggested for grades 1-3 may be suitable to meet needs of boys and girls of grades 4-6.
2. Find out reasons for certain safety rules, such as traffic regulations, taking turns at the drinking fountain, walking on the left side of the road facing traffic, etc.
3. Interview various safety personnel by individual class members or committees to find out their responsibilities for community safety.

4. Survey by committee or class of the school grounds and the community to find the safer places to play. The committee should also point out the most hazardous places.
5. Choose the safest place on school grounds to play. Where assignments of places to play have been made by the administration, discuss the reasons for being assigned to that location.
6. Explain and demonstrate how to care for a bicycle. This discussion may take place in the yard where bicycles are parked. The class may organize a bicycle safety club.
7. A rotating committee of class members may serve as the housekeeping committee for the room. One of the functions of the committee should be to remind members always to put play equipment, work materials, wraps, etc., in their proper place after use. Always report broken play equipment and apparatus.
8. Carry out responsibilities for cleaning up any broken glass or other hazards as soon as they occur or are discovered. The art committee may make sketches of "before" and "after" scenes around school or in the community.
9. Observe by class or by committees the way people obey traffic regulations. Carry on discussions about the importance of correct traffic safety practices.
10. Use films, filmstrips, books, pamphlets, encyclopedias and ask people to secure information about recommended safety practices and reasons why they are recommended.
11. Demonstrate, if needed, the correct way to move through some part of the building or grounds.
12. Learn skills in physical education which will result in safety practices while playing.
13. Discuss the topic "The importance of swimming only in places and at times designated by our parent."
14. Put trash in proper receptacles; do not throw on floor, ground, streets, highways, or other public places, such as ponds, pools, beaches, and picnic areas. A class discussion may be helpful, or class members may make posters as reminders.
15. Read stories, talk about situations and discuss practices necessary for safety at home, or on the farm. Some incident or accident may be the beginning of such an activity. The

class may work out a very simple questionnaire to take home to parents.

16. Keep a record of accidents of class members. Where the same member shows repeated accidents, the teacher should study the case and, if necessary, enlist the help of the nurse, physician, parent or others to find the causes.
17. Discuss the use of matches and fire arms—who uses them, when, why, and how?
18. Talk about some accidents which have occurred recently. Discuss the causes of these accidents—environmental, mechanical, human.
19. Discuss safety practices in planning a field trip, picnic, camping trip, or other such activity. Decide which practices are necessary in order to have a safe and happy trip.
20. Share information with others through posters, drawings, reports, bulletin board displays, assembly programs, etc.
21. Study and have discussion of common poisons, reading labels, keeping poisons away from young children, etc.

Evaluation.

1. Have accidents among class members decreased?
2. Do pupils seem to appreciate the importance of safety measures enough to carry on activities in a fairly safe manner?
3. Are pupils relatively cautious without being unduly afraid?
4. Do pupils themselves think members of the class generally practice good safety measures?

GRADES 7-8

Desired Outcomes in Terms of Knowledge, Attitudes and Practices.

1. Review suggestions for grades 1-3 and 4-6.
2. Knows many of the laws and regulations for safety, knows why they are important, the consequences of violations, such as fines, removal of privileges, etc., and why these are imposed.
3. Appreciates the work of certain safety personnel.
4. Knows some of the facts about the way alcoholic beverages affect safe living—particularly safe driving.

5. Knows how and where to find accident statistics.
6. Appreciates safe public transportation.
7. Understands the importance of being a safe pedestrian.
8. Knows how to use any new facility safely, such as gymnasium, shop, paved outdoor play areas, etc.
9. Knows and appreciates the safe use of vehicles.
10. Understands the importance of safe living at home.
11. Recognizes poisonous plants and animals.
12. Understands the need for a record of accidents.
13. Knows that it is important to keep accidents to a minimum, even where a person has accident insurance.
14. Knows what to do in case of accidents. (See section on "First Aid")
15. Understands the importance of repairing or replacing worn or defective doors, floors, bats, etc., before they cause accidents. Understands when defective equipment should not be used until repaired.

Suggested Experiences and Activities.

1. Some activities suggested for grades 1-3 or 4-6 may be adapted for use in grades 7-8.
2. Make a list and post safety regulations and give explanations for their existence. A resource person (patrolman, for example) may be interviewed to help determine reasons. List some of the fines or loss of privileges imposed for disobedience of certain of these laws. Discuss reasons for these. Outside help may be needed to carry on this activity.
3. Interview, by a committee, the following safety personnel, when appropriate, to find out the kind of work they do and why it is important:
 - Policeman.
 - Health department personnel.
 - Highway patrol.
 - County sheriff.
 - Safety patrol.
 - Physician.
 - High school teacher of health and physical education.
 - Specific teachers and other school personnel responsible for safety.

4. Read and discuss "the way alcohol affects the behavior of persons." The film "Alcohol and the Human Body," free on loan from the State Board of Health, or the filmstrip "Alcohol" produced by Young America Films, Inc., New York, may be helpful. (Refer to the section on "Alcoholic Education" for additional suggestions.)

5. Review "Accident Facts," "Vital Statistics Reports," etc., to find such items as:

- Greatest cause of death or injury to the school age child.
- Where most accidents occur.
- The type of accidents occurring most frequently.

Make charts to interpret these facts. For example, a chart showing the number of deaths or injuries from accidents as compared with the deaths or injuries from polio in this county, or in North Carolina.

6. Discuss the importance of safe public transportation and what things help to make it safe.

7. Determine the number of pedestrian accidents in the community. Determine possible causes. Discuss ways these may have been prevented.

8. Discuss the question, "Does the way you feel have anything to do with causing an accident?" For example, if you are mad, worried, sleepy, day-dreaming, etc.

9. Discuss or write a paragraph about a personal accident. Try to analyze the cause of the accident.

10. Participate in a demonstration of the correct way to use any new equipment or other facility. Help determine reasons for the safe way to use it.

11. Demonstrate the correct use and care of a bicycle. Such a demonstration may be conducted by the class for the pupils in a lower grade.

12. Survey own home to discover safety hazards. Help correct these hazards where practical.

13. Make an outline map or maps of the school and community. Locate any safety hazards which need correcting or learning how to live with.

14. Demonstrate correct labeling of poisonous medicines. Discuss reasons why these and other poisonous materials should always be clearly labeled and kept out of reach of children.

15. Discuss poisonous plants. Take a field trip to identify some of these, if practical. Pupils may sketch plants to help identify them.
16. Discuss reasons for fire drills. Practice fire drills. Find out about fire extinguishers and sprinkler systems and how and when to turn in a fire alarm.
17. Discuss the need for an accident record. Prepare a record form to include the following information: Name of the injured person, address, age, sex, grade, and school; date and time of day when accident occurred; witnesses; place of accident and nature of injury; details of how accident happened; who reported it; who attended the injured; were parents notified, and what disposition was made; number of school days lost due to injury; other pertinent information. (See sample report forms at the end of this unit.) Keep the accident record for the class up-to-date.
18. Discuss the question, "Who really pays for the cost of an accident when the person has accident insurance?"
19. Practice first aid procedures. (See section on "First Aid.")
20. Make survey of classroom, school building, or home, for hazards which could cause accidents. For example, worn light cords, broken light switches, broken window glass, porch floors, stair-rails, broken chairs, or slick floors. Study how to correct them and report your findings to proper authorities—at school, to teacher or principal—at home, to parent, etc.
21. Interview an industrial leader and/or visit an industry to learn about accident prevention and safety in industry.
22. Visit a safety conscious mechanized farmer and ask him to demonstrate safety precautions with and around farm machinery. The housewife may do the same for household machines and devices.
23. Survey the community for safe swimming places. Discuss the things which make these places safe, such as life guards, sanitation, and safe depth of water.
24. Have a role-playing or dramatization of a camping trip. After demonstration, all class members should be encouraged to participate in the discussion about safe camping.
25. Arrange for a class session on safe boating and fishing, including places to fish and boat, conduct in the boat, loading the

boat (not overloading). Part of the session may be devoted to discussing a topic, such as "Fishing for Fun as Well as Fish" and include the safety features.

Evaluation.

1. From the accident records determine the progress being made in the reduction of accidents as to number, types, and severity of accidents.
2. Have accident hazards been located and corrected or compensated for?
3. Are pupils learning skills in activities?
4. Do pupils know the facts about accidents and how to prevent them?
5. Are there more student commendations and recommendations for safe practices?

GRADE 9

Desired Outcomes in Terms of Knowledge, Attitudes and Practices.

1. Review suggestions for grades 1-8.
2. Knows the problem with respect to accidents which occur in the community, State, and nation.
3. Understands the importance of safe living conditions.
4. Knows the importance of safe living practices and understands the "human element" in safety.
5. Knows the safest ways of performing—work, play, travel, etc.
6. Knows when a condition or situation is a potential safety hazard.
7. Wants to help other people be safe.
8. Knows why it is important to report all accidents and to keep accident records.
9. Knows and participates in some of the safety programs and activities being carried on by official and voluntary organizations, civic clubs, newspapers, radio, television, etc.
10. Goes swimming, boating or fishing in safe places and uses safe practices at all times.

Suggested Activities and Experiences.

1. Discuss the need for more attention and effort to reduce accidents—especially certain types of accidents. A committee may review the accident records to find out the number, types and severity of accidents which have occurred. In a class discussion, members may mention the accidents which have happened to them or to their families during the summer. The class may be able to find out the approximate cost of each accident in terms of loss of time, cost of medical care, damage to property, total injury to persons, etc.
2. Survey building, grounds, home or community to point out safe conditions and hazards. Survey (by observation) certain safe practices in these places. The class may develop a survey form.
3. Select various phases of safety for research and detailed study by small groups, such as home safety, farm safety, safety on the playgrounds, safety in sports, safety in the school buildings, travel safety, safety in industry, etc. Progress reports may be made from time to time. Final outcomes may be shared with the entire group and with other groups in various ways.
4. Interview representatives of various organizations in the community to find out what safety programs each is promoting.
5. Discuss the qualities and practices of a safe driver. Review standards which must be met in order to obtain a driver's permit or license.
6. Find out the various driver training courses or schools being conducted in the community, such as at school, by the transportation companies, by taxi companies, by police or highway patrol, by parents, for school bus drivers, etc.
7. Ask a number of adults: "Who taught you to drive?" "Would you like to have had more instruction about driving?" "Why?"
8. Cooperate with and participate in clean-up campaigns, safety campaigns, special events, such as "Fire Prevention Week," etc., carried on by the school or community.
9. Study and discuss the topic, "The Human Element in Safety and in Accidents."

10. Plan ways for members of the class to follow-up on the things discovered in a safety survey—remove hazards, minimize hazards, change practices, such as using a step-ladder or strong chair to stand on when reaching up for objects rather than on some insecure object.
11. Review recommended safety practices for gymnasiums. Discuss reasons why these practices are needed. Have members of the class demonstrate correct practices. The physical education teacher or coach may be needed for guidance in such a demonstration.
12. Become informed about civil defense activities. (See "*Civil Defense and the Schools*", bulletin No. 290, State Department of Public Instruction.)
13. Practice first aid procedures. (See section on "First Aid.")
14. Study the causes of automobile accidents. Find out: How many of the people had been drinking alcoholic beverages? How many were speeding? What types of accidents were caused by each? At what time of day do most auto accidents occur?
15. Study and discuss the safety hazards connected with smoking.
16. Study and discuss carbon-monoxide poisoning hazards, or other types of gas poisoning.
17. Interview the leader in one of the industrial plants to find out what measures are taken to prevent accidents among workers. If practical, visit an industry to observe conditions and practices.
18. Discuss safety practices being promoted in other classes in school; for example, in the science class in handling laboratory equipment, in the home economics class in cooking and sewing, in the physical education class in sports and games, etc.
19. Report accidents. Keep a class accident record. (See p. 356 for suggestions for keeping records.)
20. Hold a panel discussion, with the coach's help, regarding safety in sports.
21. Study the different plans for accident insurance, including the plan used by the school, if any. Find out if premiums for accident insurance have increased recently. Have they increased for any school group? Why?

Evaluation.

1. Do class members feel they have improved their safety practices?
2. Do accident records show a decline in the number and severity of all types of accidents, in any particular type or types of accidents, in the number of accident repeaters?
3. Have accident hazards been located, and removed or compensated for?
4. Do pupils know the facts about accidents and their causes?
5. Are more safety suggestions being given by students?
6. Do tests on safety facts and desirable practices show that pupils have gained knowledge?

GRADES 10-12**Desired Outcomes in Terms of Knowledge, Attitudes and Practices.**

1. Review suggestions for grades 1-9.
2. Has developed an attitude of finding out how an activity should be carried on and follows directions specifically when learning a new activity.
3. Knows facts about safety and accidents sufficient to live and perform in a relatively safe manner.
4. Knows how to provide for the safety of the family, including young children.
5. Assumes some responsibility for making the community a place for safe living. Even though there may be no special health course in the senior high school, every teacher has some responsibility for making the school a place for safe living and for helping boys and girls develop favorable attitudes toward safe living.

Suggestions for Including Safety Instruction in Some of the High School Subjects Areas.

Home Economics. (See "A Guide to the Teaching of Homemaking in North Carolina Schools".)

1. Prevention of accidents to small children, such as falls, burns, drownings, poisoning, mechanical suffocation (smothering, choking, etc.).

2. Safety in household tasks, such as cooking, cleaning, decorating, sewing, storing, and caring for poisons.
3. Safety in homemaking tasks outside the home, such as shopping (including highway safety), gardening, family recreation, etc.
4. Prevention of fires, including provision of firefighting equipment in the home. (*See Civil Defense and the Schools.*)
5. The number and severity of home accidents.

Agriculture.

1. Safety in barns and other farm buildings.
2. Safety with domestic animals.
3. Safety in farm machine shops and other workshops.
4. Safety in the use of farm machines and tools, such as the axe, rake, pitchfork, and vehicular machines.
5. Traffic safety around the farm, to and from the market, etc.
6. Fire prevention, including forest fires.

Trades and Industries.

1. Safety in various industries.
2. Ways various industries have reduced accident incidence.
3. Comparative safety of various industries, including the provision for accident insurance.
4. Responsibility of the individual employee for his own safety and that of other employees.
5. Safe practices in the shop at school.

Science.

1. Safe use of laboratory glassware and other laboratory equipment.
2. Safe use of gasses, liquids, and fire.
3. Safety in the use of electricity and electrical equipment.
4. Safe and proper storage of all laboratory supplies.
5. Safety precautions against poisonous plants and animals, including insects and snakes.

Physical Education.

1. Improvement of skills in sports and games.
2. Safety in the gymnasium and dressing rooms.
3. Safe performance in physical education and athletics.

4. Safety in outings, including camping.
5. Safety without fear.
6. Safety equipment, such as head gear, shoulder pads and proper shoes.
7. Safety in the use of shot-put, javelin, discus, etc.
8. The need for safety facilities, such as a saw dust or sand pit for jumping and pole vaulting.
9. Using good form (correct skills) in physical education activities, such as high jumping, pole vaulting, hurdling, tumbling and other such activities and techniques.
10. Additional first aid and water safety instruction where such opportunities are available or can be arranged.

Mathematics.

1. Accidental death rates.
2. Injury rates of non-fatal accidents.
3. Costs of accidents in terms of:
 - Loss of time of those injured.
 - Loss of time of others (family members, etc.).
 - Medical expenses.
 - Insurance costs.
 - Property damage.

Social Studies.

1. Responsibility of the community for safety of citizens.
2. Finding, understanding, and correcting causes of accidents.
3. The individual's responsibility to the group or community.
4. Civil defense in the community.
5. Safety programs in the community. (Health Department, highway patrol, safety councils, etc.)
6. Mental health as related to safety — the accident prone person.

Evaluation.

1. Do pupils know the safety problem in their school and community?
2. Do pupils appreciate the importance of living safely?
3. Do the records show a decrease in the number and/or severity of accidents?

4. Are the pupils aware of existing hazards and do they exert their influence to change them?
5. Do the pupils understand the facts of safety and accidents, take care of their own situation in so far as is possible, and work to make the community a safer place to live?
6. Do tests regarding safety facts and practices indicate that pupils have developed the understandings necessary to live safely?

SELECTED REFERENCES

FOR ELEMENTARY PUPILS:

1. Health textbooks.
2. Supplementary health books.
3. Social studies and reading materials.
4. Library and reference materials.

FOR HIGH SCHOOL PUPILS:

1. Same as for elementary.
2. *Accident Facts*. Published annually by National Safety Council, 425 N. Michigan Avenue, Chicago, Illinois.
3. *Safety Education Data Sheets*. Reprints from "Safety Education Magazine". (See No. 11d of teacher references.)
4. *Safety Instruction Cards*. Basic Safe Practices (See No. 11e of teacher references.)
5. *Sportsmanlike Driving*. American Automobile Association, Washington, D. C. 1947.
6. *Man and The Motor Car*. Prentice Hall, Inc., New York. (Formerly published by Association of Casualty and Surety Companies, New York.)
7. *Traffic Accidents*. A yearly summary of North Carolina traffic accident facts, North Carolina Department of Motor Vehicles, Highway Safety Division, Raleigh, N. C.
8. *A Handbook for School Bus Drivers*. Prepared by North Carolina Department of Motor Vehicles, Highway Safety Division, in cooperation with North Carolina State Board of Education, 1953. Order from Highway Safety Division, State Department of Motor Vehicles, Raleigh, N. C.

FOR TEACHERS:

1. All pupil references.
2. General health education references. (See lists in this publication.)
3. *Safety Education*. 18th yearbook. A.A.S.A., National Education Association, 1201 Sixteenth Street, N. W., Washington, D. C. 1948.
4. *Schools and Civil Defense*. Publication No. 290, State Department of Public Instruction, Raleigh, N. C. 1953.
5. Seaton, Don Cash. *Safety in Sports*. Prentice-Hall, Inc., New York. 1948.
6. Stack, Herbert, J., et al. *Education for Safe Living*. Prentice-Hall, Inc. New York. 1949.
7. *Who is Liable for Pupil Injuries?* Prepared by the N. E. A. Research Division for the National Commission on Safety Education. National Education Association, 1201 Sixteenth Street, N.W., Washington, D. C. 1950.
8. Cottrell, H. Louise. *Safety Education in the Elementary School*. Center for Safety Education, Division of General Education, New York University, New York.
9. *A Program of Fire Prevention in Schools*. Bulletin No. 339, Commonwealth of Pennsylvania, Department of Public Instruction, Harrisburg. 1951.
10. *Rules, Regulations and Laws Governing Public School Transportation in North Carolina*. North Carolina State Board of Education, 1950.
11. National Commission on Safety Education. National Education Association, 1201 Sixteenth Street, N. W., Washington, D. C.
 - a. *Checklist of Safety and Safety Education in your School*.
 - b. *Teachers and Children Plan for Safe Living*.
 - c. *Safety in Physical Education for the Classroom Teacher*.
 - d. *Bicycle Safety in Action*.
 - e. *The Expanding Role of School Patrols*.
 - f. *Safety Education in Rural Schools*.
 - g. *The Teacher Fireman Team*.
 - h. *The High School Principal and Safety*.

- i. *Safety in Family Living.*
 - j. *High School Driver Education—Policies and Recommendations.*
 - k. *The Physical Education Instructor and Safety.*
 - l. *Standards and Training Programs for School Bus Drivers.*
 - m. *Safety Education Teaching Aids and Materials.* Free Publications list.
12. National Safety Council, 425 N. Michigan Avenue, Chicago 11, Illinois.
- a. *Accident Facts.* Published annually. Extensive coverage of all types of accidents.
 - b. *Safety Education Magazine.* Issued monthly September through May.
 - c. *Student Accident Records and Analysis.*
 - d. *Safety Education Data Sheets.* Set of 58, giving safe practices for a variety of activities from safety on school buses to hook and line fishing. Low in cost. For teacher and student use.
 - e. *Safety Instruction Cards.* Approximately 700 for a variety of topics from how to lift to safe use of hand tools for safe industrial practices. Low in cost. For teacher and student use.
 - f. *Foundation for Safe Living.* A manual for Elementary Teachers.
 - g. *Safety Education in the Secondary School.* Manual for Teachers and Administrators.
 - h. *Student Safety Activities.* Manual for both Teachers and Students.
 - i. *Safety Education Memos:*
 - No. 2, Elementary Bibliography.
 - No. 2A, Secondary Bibliography.
 - No. 3, Student Accident Records and Analysis, a guide.
 - j. Free Publication lists, safety service guides, including price lists.
 - No. 2.1, Occupational Safety Services.
 - No. 2.3, School Safety Services.
 - No. 2.4, Traffic Safety Services.
 - No. 2.5, Farm Safety Services.

SOURCES OF MATERIALS AND INFORMATION.

1. North Carolina Highway Safety Division, Department of Motor Vehicles, Revenue Building, Raleigh, N. C.
2. North Carolina Industrial Safety Section, Industrial Commission, Education Building, Raleigh, N. C.
3. North Carolina State Board of Health, Raleigh, N. C.
4. North Carolina Department of Labor, Labor Building, Raleigh, N. C.
5. North Carolina Council for Civil Defense, Mansion Park Building, Raleigh, N. C.
6. Carolina Motor Club, 701-703 South Tryon Street, Charlotte, N. C., and its national affiliate, the American Automobile Association, Mills Building, Washington, D. C.
7. North Carolina Association of Insurance Agents, Inc., Commercial Building, Raleigh, N. C., and its national affiliate, The Association of Casualty and Surety Companies, 60 John Street, New York, New York.
8. National Commission on Safety Education of the National Education Association, 1201 Sixteenth Street, N. W., Washington 6, D. C.
9. National Safety Council, 425 N. Michigan Avenue, Chicago 11, Illinois.
10. Center for Safety Education, New York University, 8 Fifth Avenue, New York 11, New York.
11. U. S. Office of Education, Department of Health, Education and Welfare, Washington 25, D. C.
12. American National Red Cross, Southeastern Division, Atlanta, Georgia.
13. Metropolitan Life Insurance Company, New York.
14. National Board of Fire Underwriters, 85 John Street, New York, New York.
15. National Fire Protection Association, Boston.

STANDARD STUDENT ACCIDENT REPORT FORMS AND INSTRUCTIONS

(See following page for forms)

- A. Use Part A of the form to report all student accidents. Injuries requiring a doctor's care, or keeping a student out of school one-half day or more, should be reported regardless

of where the student was when injured (on school property, enroute to or from school, at home or elsewhere).

- B. Use Part B of the form to report additional information on injuries to students while under the jurisdiction of the school. School jurisdiction accidents, however slight, should be reported promptly. Unless otherwise defined by administrative ruling or court action, school jurisdiction accidents are those occurring while students are on school property, in school building and on the way to and from school.

IMPORTANT: In order that maximum use be made of accident reports, it is essential that the accident be described in sufficient detail to show the unsafe acts and unsafe conditions existing when the accident occurred. The description should answer such questions as: What was the student doing at the time of the accident? (Playing tag football, operating lathe, cutting lawn, etc.) Was he using any apparatus, machine, vehicle, tool or equipment? How was he using it? Would it have been safer to do it some other way? Was another person involved in the accident in any way?

All school systems are urged to send their accident summaries to the National Safety Council so that the published tabulations of student accident experience may be as complete and accurate as possible.

The National Safety Council will furnish without charge a one year's supply of both the accident report form and the summary sheet. These forms are not copyrighted and supplies for subsequent use may be printed locally or purchased from the National Safety Council at the following rates:

<i>1 to 9 copies</i>	<i>10 to 99 copies</i>	<i>100 to 999 copies</i>	<i>1000 or more copies</i>
\$.05 each	\$.02 each	\$.015 each	\$.013 each

School systems sending monthly reports during the full school year will be given a copy of *Accident Facts*—the issue in which their figures are included. *Accident Facts* is the Council's annual statistical handbook. Each system sending summaries to the National Safety Council is supplied with 25 summary sheets yearly.

(For further information on the preparation of the original accident report and the monthly summary sheets, see Safety Education Memo No. 3—STUDENT ACCIDENT RECORDS AND ANALYSIS.)

STANDARD STUDENT ACCIDENT REPORT FORM

Part A. Information on ALL Accidents

1.	Name: _____	Home Address: _____
2.	School: _____	Sex: M <input type="checkbox"/> ; F <input type="checkbox"/> . Age: ____ Grade or classification: ____
3.	Time accident occurred: Hour ____ A.M.; ____ P.M. Date: _____	
4.	Place of Accident: School Building <input type="checkbox"/> School Grounds <input type="checkbox"/> To or from School <input type="checkbox"/> Home <input type="checkbox"/> Elsewhere <input type="checkbox"/>	

	NATURE OF INJURY	DESCRIPTION OF THE ACCIDENT
5.	Abrasion _____ Fracture _____ Amputation _____ Laceration _____ Asphyxiation _____ Poisoning _____ Bite _____ Puncture _____ Bruise _____ Scalds _____ Burn _____ Scratches _____ Concussion _____ Shock (el.) _____ Cut _____ Sprain _____ Dislocation _____ Other (specify) _____	<p>How did accident happen? What was student doing? Where was student?</p> <p>List specifically unsafe acts and unsafe conditions existing. Specify any tool, machine or equipment involved. _____</p> _____ _____ _____ _____ _____ _____ _____
	Abdomen _____ Foot _____ Ankle _____ Hand _____ Arm _____ Head _____ Back _____ Knee _____ Chest _____ Leg _____ Ear _____ Mouth _____ Elbow _____ Nose _____ Eye _____ Scalp _____ Face _____ Tooth _____ Finger _____ Wrist _____ Other (specify) _____	 _____ _____ _____ _____ _____ _____ _____ _____

6.	Degree of Injury: Death <input type="checkbox"/> Permanent Impairment <input type="checkbox"/> Temporary Disability <input type="checkbox"/> Nondisabling <input type="checkbox"/>
7.	Total number of days lost from school: _____ (To be filled in when student returns to school)

Part B. Additional Information on School Jurisdiction Accidents

8. Teacher in charge when accident occurred (Enter name): _____ Present at scene of accident: No: _____ Yes: _____			
IMMEDIATE ACTION TAKEN	First-aid treatment _____	By (Name): _____	
	Sent to school nurse _____	By (Name): _____	
	Sent home _____	By (Name): _____	
	Sent to physician _____	By (Name): _____	
	Physician's Name: _____		
	Sent to hospital _____	By (Name): _____	
Name of hospital: _____			
10. Was a parent or other individual notified? No: _____ Yes: _____ When: _____ How: _____ Name of individual notified: _____ By whom? (Enter name): _____			
11. Witnesses: 1. Name: _____ Address: _____ 2. Name: _____ Address: _____			
LOCATION	Specify Activity		
	Athletic field _____	Locker _____	Remarks What recommendations do you have for preventing other accidents of this type? _____ _____ _____ _____ _____ _____ _____ _____ _____ _____
	Auditorium _____	Pool _____	
	Cafeteria _____	Sch. grounds _____	
	Classroom _____	_____ shop _____	
	Corridor _____	Showers _____	
	Dressing room _____	Stairs _____	
	Gymnasium _____	Toilets and _____	
	Home Econ. _____	washrooms _____	
	Laboratories _____	Other (specify) _____	
Signed: Principal: _____ Teacher: _____			



STUDENT ACCIDENT SUMMARY

Month of _____ Year _____

Form Student Acc. 2 (1941)

City _____ School _____ No. of school days in above month _____

(There were _____ accidental deaths this month. Copies of original report cards covering them are attached.)

CLASSIFICATION	STUDENTS KILLED AND INJURED, BY GRADES													Un- class.	Days Lost All Grades
	All Grades	K't'n	1st Grade	2nd Grade	3rd Grade	4th Grade	5th Grade	6th Grade	7th Grade	8th Grade	9th Grade	10th Grade	11th Grade		
1. TOTAL ACCIDENTS															
SCHOOL BUILDINGS															
2. Classrooms & auditorium															
3. Laboratories															
4. Vocational shops															
5. Domestic science dept.															
6. Gymnasium—basketball															
7. " —other															
8. Swimming pool & showers															
9. Dressing-rooms & lockers															
10. Toilets & washrooms															
11. Corridors															
12. Stairs & stairways															
13. Other building															
SCHOOL GROUNDS															
4. Apparatus—swings															
5. " —slides															
6. " —teeters															
7. " —bars															
8. " —other															
9. Athletics—baseball															
10. " —football															
11. " —soccer															
12. " —track events															
13. Other organized games															
14. Running															
15. Unorganized Scuffling															
16. Activities Other falls															
17. Other															
GOING TO OR FROM SCHOOL															
8. Motor vehicle—bicycle															
9. Other motor vehicle															
10. Other bicycle															
11. Other															
HOME															
12. Falls															
13. Burns, scalds, explosions															
14. Cuts & scratches															
15. Other home															
OTHER															
6. Motor vehicle—bicycle															
7. Other motor vehicle															
8. Other bicycle															
9. Other street & sidewalk															
10. Playgrounds (not school)															
11. Other places															
ENROLLMENTS AND DAYS LOST															
12. Enrollments															
13. Days lost—This month's accidents															
14. Days lost this month from previous month's accidents															

Report made by _____ Title _____

One copy of this report should be sent each month to the National Safety Council, 425 North Michigan Ave., Chicago 11, covering all schools in the city that maintain records.

GENERAL REFERENCES

In addition to the materials and sources listed below, selected lists are included at the end of each section and a few specific references are interspersed in the material. (See Index for pages.)

A few specific references have been cited in State Department of Public Instruction bulletins. However, all bulletins for teachers published by the State Department of Public Instruction should be used as sources of material relative to health education.

General Listing of Health Education Materials.

BOOKS:

1. *Health In Schools*. Twentieth Yearbook. Revised Edition. American Association of School Administrators. 1201 Sixteenth Street, Northwest, Washington 6, D. C. 1951.
2. *Health Education*. NEA-AMA. National Education Association, Washington 6, D. C. 1948.
3. *Administration of the Health, Physical Education and Recreation Program in Secondary Schools*. The National Association of Secondary School Principals, 1201 Sixteenth Street, Northwest, Washington 6, D. C. May, 1953.
4. *Health in the Elementary Schools*. Twenty-ninth Yearbook. National Elementary Principal. National Education Association, 1201 Sixteenth Street, N.W., Washington 6, D. C. 1950.
5. Grout, Ruth. *Health Teaching in Schools*. Revised Edition. W. B. Saunders Company, Philadelphia, Pennsylvania. 1953.
6. Wheatly and Hallock. *Health Observation of School Children*. McGraw-Hill Book Company, Inc., New York. 1951.
7. Williams and Brownell. *The Administration of Health Education and Physical Education*. W. B. Saunders Company, Philadelphia, Pennsylvania. 1951.
8. Coops, Helen. *Health Education in Elementary Schools*. A. S. Barnes and Company, New York. 1950.
9. *Proceedings of the Midcentury White House Conference on Children and Youth*. Report of conference sessions. Health Publications Institute, Raleigh, N. C. 1950.

10. Turner, C. E. *School Health and Health Education*. The C. V. Mosby Company. St. Louis, Missouri. 1952.
11. *Developing Democratic Human Relations*. First Yearbook. American Association for Health, Physical Education and Recreation, 1201 Sixteenth Street, Northwest, Washington 6, D. C. 1951.
12. *An Experience in Health Education*. W. K. Kellogg Foundation, Battle Creek, Michigan. 1950.
13. Brownell, Clifford. *Principles of Health Education Applied*. McGraw-Hill Book Company, Inc. New York. 1949.
14. Oberteuffer, Delbert. *School Health Education*. Harper and Brothers, New York. 1949.
15. Williams and Abernathy. *Health Education in Schools*. Ronald Press Company, New York. 1949.
16. Lamkin, Nina B. *Health Education in Rural Schools and Communities*. A. S. Barnes and Company. New York. 1946.
17. Smiley and Gould. *Your Health*. The Macmillan Company, New York. 1951.
18. *Toward Better Teaching*. Yearbook. Association for Supervision and Curriculum Construction. National Education Association, 1201 Sixteenth Street, Northwest, Washington, D. C.

HEALTH PUBLICATIONS:

1. *Today's Health*. American Medical Association, 535 N. Dearborn Street, Chicago 10, Illinois. \$3.00 per year. Suitable for libraries.
2. *Journal of the American Association for Health, Physical Education and Recreation*. National Education Association. 1201 Sixteenth Street, Northwest, Washington, D. C. \$5.00 per year. A professional publication.
3. *The Journal of School Health*. The American School Health Association, 3335 Main Street, Buffalo 14, New York. \$3.00 per year. A professional publication.
4. *The News Letter*. Published by the North Carolina Association for Health, Physical Education and Recreation, Education Building, Raleigh, N. C. \$1.00 per year.

5. *The National Parent Teacher Magazine*. 600 South Michigan Avenue, Chicago 5, Illinois. \$2.00 per year.
6. *Childhood Education*. Association for Childhood Education International, 1200 Fifteenth Street, Northwest, Washington 5, D. C. \$4.00 per year.
7. *Understanding the Child*. The National Committee on Mental Hygiene, Inc., North Queen and McGovern Streets, Lancaster, Pennsylvania. \$1.00 per year.
8. Junior Life Adjustment Booklets—Subscription: \$3.50 from September through May.
Life Adjustment Booklets—Subscription: \$3.50 from September through May.
Better Living Booklets—Subscription: \$3.50 from September through May. (For parents and teachers.)
Science Research Associates, 57 W. Grand Avenue, Chicago, Illinois.

Free on request

1. *The Health Bulletin*, a monthly publication of the State Board of Health, Raleigh, N. C.
2. *Health Bulletin for Teachers*. Metropolitan Life Insurance Company, New York.
3. *North Carolina Traffic Death Toll*. A monthly summary of motor vehicle traffic accidents in the State. North Carolina Department of Motor Vehicles, Highway Safety Division, Raleigh, N. C.
4. *Inventory*. A bi-monthly Journal on Alcohol and Alcoholism. North Carolina Rehabilitation Program, Box 9118, Raleigh, N. C.
5. Publications by the Voluntary Health Agencies of the State:
News Letter. North Carolina Tuberculosis Association, Raleigh, N. C.
Tar Heel Cancer News. American Cancer Society, North Carolina Division, Haynes Building, Mount Airy, N. C.
North Carolina Heart News. North Carolina Heart Association, Miller Hall, Chapel Hill, N. C.
Outburst. The Easter Seal Publication. The North Carolina Society for Crippled Children and Adults, Inc., Chapel Hill, N. C.

6. *Health Notes*. Service bulletin. Scott, Foresman and Company, Atlanta, Georgia.

Sources of Health Education Materials and Information

OFFICIAL STATE AGENCIES, RALEIGH, NORTH CAROLINA.

1. State Department of Public Instruction, Education Building.
2. State Board of Health, Health Building.
3. State Department of Public Welfare, Education Building.
4. State Commission for the Blind, Mansion Park Building.
5. Council on Civil Defense, Mansion Park Building.
6. State Department of Agriculture, Agricultural Building.
7. Agricultural Extension Service, State College.
8. State Department of Motor Vehicles, Safety Division, Highway Building.
9. Alcoholic Rehabilitation Program, Agricultural Building.
10. Recreation Commission, Education Building.
11. State Department of Conservation and Development, Education Building.
12. State Department of Labor, Labor Building.
13. Wildlife Resources Commission, Revenue Building.

OTHER NORTH CAROLINA AGENCIES.

1. Voluntary Health Agencies, See "Community Health" section.
2. See *Directory of the North Carolina Health Council*. Health Publications Institute, Raleigh, North Carolina.
3. School of Public Health, Chapel Hill, North Carolina.
4. Colleges and Universities in the State.
5. North Carolina Congress of Parents and Teachers, Gibsonville, North Carolina.
6. North Carolina Congress for Colored Parents and Teachers, Raleigh, N. C.

OFFICIAL NATIONAL AGENCIES.

1. United States Department of Health, Education and Welfare, Washington, D. C.
2. United States Department of Agriculture, Washington, D. C.

3. World Health Organization, Palais des Nations, Geneva, Switzerland.

PRIVATE AGENCIES AND ORGANIZATIONS.

1. American Association for Health, Physical Education and Recreation, a Department of the National Education Association, 1201 16th St., N.W., Washington, D. C.
2. American Dental Association, 222 East Superior St., Chicago 11, Ill.
3. American Medical Association, 535 North Dearborn St., Chicago 10, Ill.
4. Athletic Institute, 209 South State Street, Chicago 4, Ill.
5. American Social Hygiene Association, 1790 Broadway, New York 14, N. Y.
6. National Safety Council, 425 N. Michigan Ave., Chicago 11, Ill.
7. National Society for the Prevention of Blindness, 1790 Broadway, New York 19.
8. Metropolitan Life Insurance Co., 1 Madison Ave., New York 10.
9. American Hearing Society, 817 14th St., N.W., Washington 5, D. C.
10. John Hancock Life Insurance Company, Boston, Mass.
11. National Council on Family Relations, 1126 E. 59th St., Chicago, Ill.
12. American School Health Association, 3335 Main St., Buffalo 14, New York.

SOME SOURCES OF VISUAL AND AUDITORY AIDS IN NORTH CAROLINA.

1. Film Library, State Board of Health, Raleigh, North Carolina. Catalogue containing annotated lists available. Inquire at the local health department or write Film Clerk, State Board of Health. Films are free except return transportation charges.
2. Visual Aids Department, North Carolina State College, Raleigh, North Carolina. Catalogue containing annotated list available. Films free except transportation charges.
3. North Carolina Council for Civil Defense, Mansion Park Building, Raleigh, North Carolina. See *The Schools and*

Civil Defense, State Department of Public Instruction publication or write for list of films.

4. Voluntary Health Agencies:

Tuberculosis Association films are distributed through the State Board of Health film library.

The Heart Association, Miller Hall, Chapel Hill, has films and filmstrips for loan free. Write for list and how to obtain them.

The American Cancer Society, North Carolina Division, Haynes Building, has films for loan free to schools. Write for lists.

North Carolina Society for Crippled Children and Adults, Inc. 212 E. Rosemary St., Chapel Hill.

5. Wildlife Resources Commission, Revenue Building, Raleigh, North Carolina. Films available on loan free to schools. Write for information and lists.

6. Highway Safety Division, Department of Motor Vehicles. Highway Building, Raleigh, N. C. Write for list of films available free to schools.

7. Extension Division, Communications Center. University of North Carolina, Chapel Hill, North Carolina. Catalogue published contains lists of aids and information on various plans for renting films. Write for information.

APPENDIX

JOINT SCHOOL HEALTH PLAN*

- I. The State school health plan shall be a joint plan of the State Board of Health and the State Board of Education. The responsibility for supervising the program shall be divided between these two agencies as follows:
 1. The State Board of Health shall have general supervision of the technical qualifications and duties of the professional personnel, such as physicians, nurses, hearing technicians, sanitarians, dentists, laboratory workers, etc.
 2. The State Department of Public Instruction shall have general supervision of technical qualifications and duties of the teaching and supervisory personnel, such as health, safety and physical education supervisors, and special education teachers. The State Department of Public Instruction shall have general supervision of the educational aspects of all health services to insure that the educational possibilities of health services are adequately utilized. The responsibility for the selection, preparation and distribution of instructional materials in all areas rests with the State Department of Public Instruction as provided by law; but with respect to medical and health facts, the State Department of Public Instruction will consult with the State Board of Health.
 3. The State Department of Public Instruction and the State Board of Health shall be jointly responsible for:
 - a. The definition of health problems to insure that expenditures are not made on health problems that are not important.
 - b. The work of health educators conducting both school and community programs insure that both the public health interest and the school interest are correctly represented.

*Original "Joint School Health Program" was approved by the State Board of Health and J. W. Roy Norton, Secretary and State Health Officer, June 2, 1949; State Board of Education and Dr. Clyde A. Erwin, State Superintendent of Public Instruction, July 14, 1949.

The Revised "Joint School Health Plan" was approved February 13, 1952, by J. W. Roy Norton, Secretary and State Health Officer; Clyde A. Erwin, State Superintendent of Public Instruction and the N. C. Medical Society School Health Committee.

- c. The administration of the program in accordance with recognized policies of the State Board of Health and the State Board of Education.
 - d. Schedules of service personnel working in schools in order that conflicts will not occur between health service programs and other school activities, and that health services will in so far as possible be correlated with health instruction.
4. Both State agencies through their respective staffs shall exchange views regularly on all points mentioned in items (1) and (2) above, and in so far as possible shall arrive at joint decisions in the administration of the plan.
- II. The School Health Coordinating Service, which officially represents the State Department of Public Instruction and the State Board of Health and is jointly responsible to the State Health Officer and the State Superintendent of Public Instruction, is designated as the administrative unit, with official division or bureau status in each agency, to supervise and promote the general school health program. This inter-agency division is specifically delegated the responsibility for administering the school health funds and the programs carried out with these funds in accordance with the principles contained in this plan.
- Cooperation with other divisions of the two agencies shall be carried out in accordance with the general policies of the above State agencies.
- III. Regarding the expenditure of school health funds, it is proposed that the \$550,000 appropriated to the State Board of Education and an amount equal to 40c per pupil (amounting to \$326,211 the first year) allocated to counties for school health by the State Board of Health be considered as a single fund in order that local health officers and school superintendents may plan jointly for the use of the total of these funds.
- This proposal does not intend that the funds will be pooled in State or local budgets or that the normal budgetary procedures of the two State agencies concerned will be changed.
- IV. The general operation of the school health plan will be:
1. To allocate the maximum of funds available to local schools and health departments as grants-in-aid.

2. That the health officer of each local health jurisdiction and the superintendent of those school districts in each jurisdiction shall submit to the School Health Coordinating Service a joint plan or plans for the expenditure of the funds allotted to each such area.

The School Health Coordinating Service shall provide assistance to the local areas in preparing these plans and shall have final authority in resolving local differences of opinion as to the details of the program. Funds from both State agencies shall be withheld until a satisfactory plan has been prepared.

3. The Board of Education funds will be allotted on the basis of 50 cents per pupil in average daily membership for the previous school year for each administrative unit and in addition thereto there shall be allotted the sum of \$1,000 to each county of the State, which shall be divided between the administrative units within the county on the basis of the average daily membership within each unit. The Board of Health funds will be allotted on the basis of 40 cents per pupil in average daily membership for the previous year for each local health department jurisdiction.
4. School health funds may be spent for the purposes listed below:
 - a. Medical, dental, nursing, education, psychiatric, technical, and allied personnel on a full or part-time basis. Helping teachers or supervisors of health, physical education and safety may be employed, but teachers for classroom instruction may not be paid from such funds.
 - b. Fees for clinicians' services (examinations and other diagnostic services).
 - c. Correction of chronic physical defects for school children whose parents are unable to pay and only when funds from other sources are not available.
 - d. Travel of personnel and for transporting children to clinics and hospitals.
 - e. Supplies and equipment essential for conducting a school health program.
 - f. For approved in-service training programs.

5. State Board of Health funds will be budgeted through local health department budgets and State Board of Education funds through local school budgets in the regular manner. The division of the personnel between schools and health departments is to be at local option and subject to joint agreement by school superintendent and health officers. As much flexibility as possible will be allowed in local arrangements in accordance with the following general principles:
 - a. Full-time medical, nursing, and allied personnel should be paid from health department funds in so far as possible.
 - b. Part-time medical, nursing and allied personnel should be paid from school funds if health department funds are not adequate for both full-time and part-time personnel of this type.
 - c. Salaries for sanitarians should be paid out of health department funds only.
 - d. Funds earmarked for school health may not be used for general clerical or stenographic employees.
 - e. Health, physical education and safety consultants, or supervisors employed to work in city or county school administrative units should be paid from school funds in so far as possible.
 - f. Health educators should be paid:
 - (1) From school funds when conducting school programs exclusively.
 - (2) From either school or health department funds when conducting both school and community programs.
 - g. Fees for the correction of chronic remediable defects for children of parents unable to pay for such services and when other funds are not available should be paid from school funds in so far as funds will permit.
 - h. All medical, nursing and allied personnel employed should meet merit system standards where those standards apply. Educational personnel will meet the standards set up by the State Board of Education.
6. Personnel assigned to the health department in so far as their training permits will carry out generalized public

health duties, schedules being arranged so that the total school health service rendered by all health department personnel will equal or exceed the amount of funds budgeted. This arrangement will:

- a. Make possible full utilization of health service personnel outside of school hours and during vacation and summer periods.
 - b. Provide for more efficient operation of the program, since public health nurses and certain other personnel in the health departments work on a district basis within their jurisdictions performing a variety of duties within that district.
 - c. Make recruitment of personnel easier in some cases, since most employees would probably prefer to have employment providing generalized experience.
7. Expenditures for correction of chronic remediable defects for children shall be approved by the local health officer and school superintendent jointly. This will insure that the charges are known by the health officer to be within reasonable limits according to local medical standards.
 8. The schedule of fees for correction of defects shall be negotiated (worked out jointly) in each local area by the school superintendent, health officer, and the medical society. The schedule shall be on either a fixed basis or a maximum and minimum basis.
 9. It is strongly recommended that the local superintendent, health officer, medical and dental societies work out jointly with the local welfare department a plan for the use of the services of the local welfare department for determining need for financial aid from school health funds.

LEGAL ASPECTS OF THE SCHOOL HEALTH PROGRAM

State Level

The State Superintendent of Public Instruction is the administrative head of the public school system. He is responsible for the administration and supervision of the school health program, just as he is responsible for other phases of the school program. The State Superintendent of Public Instruction is specifically responsible for the preparation of courses of study in health and other subjects taught in the public schools. The general supervision of the free public schools system, and of the State educational funds, shall be vested in the State Board of Education. The controller is responsible to the State Board of Education for the fiscal affairs of the public schools.

The State Board of Health is responsible for the control of communicable diseases. Inspection and approval or disapproval of the sanitation of the schools, including the lunchrooms, is by legislation a responsibility of the representatives of the State Board of Health or the local health departments. These representatives usually make written recommendations for needed improvements to the principal and superintendent.

By a joint agreement of the State Superintendent of Public Instruction and the State Health Officer, and by approval of the State Board of Education and the State Board of Health, the School Health Coordinating Service is responsible for the administration and supervision of the school health service program. Under this agreement, the State Superintendent has final jurisdiction on all matters pertaining to all phases of health instruction and to administrative affairs carried on within the schools. The State Health Officer has final jurisdiction on technical, medical, dental, and nursing services and the control of communicable diseases. The agreement provides for joint planning and cooperation regarding the services rendered by the members of the staff of the School Health Coordinating Service.

Summary of Legal Aspects of School Health and Safety.

Many of the laws pertaining to school health do not require as high standards as are generally provided. Accreditation standards more nearly represent the status of health facilities

and practices. See Handbook for Elementary and Secondary Schools, 1953, State Dept. of Public Instruction.

- (1) School buses may be used to attend State planned health activities provided approval is given by State Board of Education. (Ch. 115, Sec. 374.)
- (2) A Division of Special Education to promote special courses of instruction for handicapped children has been provided for. (Ch. 818.)
- (3) County Superintendent of Schools must report all defective children. (Ch. 115, Sec. 123, 312.)
- (4) Feeble-minded (non-educable) children may not be required to attend public schools. (Ch. 115, Sec. 303.)
- (5) Blind and deaf children must attend some school provided for those so afflicted. (Ch. 115, Sec. 309, 310, 311.)
- (6) A school for crippled children must be operated at the orthopedic hospital in Gastonia. (Ch. 131, Sec. 3.)
- (7) A school and hospital is provided for at Camp Butner to treat, care for, train, and educate children affected with cerebral palsy. (Ch. 131, 127-135.)
- (8) Administrators and teachers must have physical examinations annually. (Ch. 115, Sec. 140, 354.)
- (9) The provisions of the Workmen's Compensation Act are applicable to all school employees. (Ch. 115, Sec. 370.)
- (10) Teachers are required to give children physical examinations every three years to detect signs of physical defects. (Such an examination is termed "teacher screening.") Children screened out by teachers are referred for medical examination by a representative of the State Board of Health. The present practice is for teachers to give screening test annually. (Ch. 115, Sec. 316.)
- (11) Free dental treatment must be provided each year by the State Board of Health for as many school children as possible. (Ch. 115, Sec. 321.)
- (12) County or city health officers must examine every child reported as having ear, nose, eye, or throat defect, or those suspected as having hookworm disease. (Ch. 130, Sec. 22.)

- (13) All children must be immunized against smallpox before entering school. (Ch. 130, Sec. 183.)
- (14) All children must be immunized against diphtheria between the ages of six and twelve months. (Ch. 130, Sec. 190.)
- (15) All children must be immunized against whooping cough before reaching the age of one year. (Ch. 130, Sec. 190-1.)
- (16) No principal or teacher shall permit a child to enter school who has not been immunized against smallpox, diphtheria, and whooping cough. (Ch. 130, Sec. 183, 190-1.)
- (17) The State Board of Health is authorized to make rules and regulations for the control of communicable diseases. Such rules and regulations include measures pertaining to sanitation of the lunch room, pure water supply, garbage and sewage disposal. (Ch. 130, Sec. 4.)
- (18) Either the physician, parent, person in loco parentis, or the householder must report cases which he or she suspects as being communicable. (Ch. 130, Sec. 173, 174.)
- (19) County boards of health may make such additional rules and regulations for the control of communicable diseases as they deem necessary. (Ch. 130, Sec. 176.)
- (20) The attending physician, the principal, or the superintendent must report the unusual prevalence of impetigo, pediculosis, ringworm, scabies, or Vincent's infection. (Regulation—State Board of Health.)
- (21) The State Superintendent of Public Instruction must provide a course of study on health education. (Ch. 115, Sec. 62, 63.)
- (22) The County Board of Education must provide for the teaching in the elementary school of health education, including the nature and effect of alcoholic drinks and narcotics. (Ch. 115, Sec. 62.)
- (23) The teaching of health is required two periods (45-60 minutes each) per week to all ninth grade students. (Regulation—State Department of Public Instruction.)

- (24) The State Board of Education shall have entire control of examining, accrediting without examination, and certification of teachers, principals, supervisors and superintendents. (Ch. 115-150.)
- (25) Institutions giving instruction to teachers or prospective teachers must give adequate time and attention to the best methods in teaching health education. (Ch. 115, Sec. 63.)
- (26) The County Health Officer and/or the City Health Officer must cooperate with the schools in teaching children the importance of health and the methods of preventing disease. (Ch. 130, Sec. 22, 32.)
- (27) One day during each school year shall be designated by the State Superintendent of Public Instruction as Temperance or Law and Order Day. (Ch. 115, Sec. 336.)
- (28) Mouth hygienists, who may teach mouth hygiene and the proper care of teeth, may be licensed to work in the public institutions and public schools of the State. (Ch. 90, Sec. 49, 50, 51, 52.)
- (29) The County or City Board of Education has the power of control and direction in the construction or repair of school houses. (Ch. 115, Sec. 84.)
- (30) Plans for the construction of school houses must be approved by the State Superintendent of Public Instruction. (Ch. 115, Sec. 84.)
- (31) It is the duty of the County or City Board of Education to provide adequate equipment and supplies for the proper carrying-out of the school program. (Ch. 115, Sec. 91.)
- (32) Principals and teachers may be held responsible for damages to school property caused by their carelessness. (Ch. 115, Sec. 90.)
- (33) The County Superintendent of Schools must visit and inspect the schools. (Ch. 115, Sec. 106, 115.)
- (34) The County or Municipal Health Officer must make a sanitary inspection of schools during summer months. (Ch. 130, Sec. 22, 32.)

- (35) The County Board of Education must provide sanitary means of sewerage disposal for the schools. (Ch. 115, Sec. 92, 93, 94.)
- (36) The State Board of Education may close schools during any period of emergency. (Ch. 115, Sec. 351.)
- (37) The schools must be provided with a good water supply. (Ch. 115, Sec. 96.)
- (38) The orders of the Board of Health for the protection of health in the district must be carried out by those in authority in the public schools. (Ch. 115, Sec. 139.)
- (39) School committees may provide for school lunch rooms. (Ch. 777.)
- (40) The State has a revolving fund established to help *counties* take advantage of Federal aid for school lunch rooms.
- (41) Lunch rooms and cafeterias may not operate on a profit basis. Earnings must go into lowering the cost of food. (Ch. 115-381.)
- (42) A course in safety must be taught in the first eight grades of the public schools. (Resolution No. 29, House and Senate, 1939.)
- (43) A pamphlet of the traffic laws must be published by the State Highway Commission and delivered annually for distribution to all public school teachers. (Ch. 20, Sec. 212, 213, 214, 215.)
- (44) Motor vehicles must stop before passing, in either direction, a school bus loading or discharging children. (Ch. 20, Sec. 217.)
- (45) School bus drivers must have certificates from a State Highway patrolman and the county head mechanic. (Ch. 20, Sec. 218.)
- (46) Loaded school buses must not be driven faster than thirty-five miles per hour. (Ch. 20, Sec. 218.)
- (47) School buses must be inspected every thirty days. (Ch. 115, Sec. 374.)
- (48) In purchasing new buses, the State Board of Education must buy those with safest equipment possible and with adequate heating facilities. (Ch. 115, Sec. 377., Ch. 925.)

- (49) Parents may be paid up to six hundred dollars compensation for injuries and/or death to school children arising from injuries received by school bus accidents. Ch. 115, Sec. 340, 341, 342, 343, 344, 345.)
- (50) Monitors may be appointed for school buses. (Ch. 670.)
- (51) The Boys' Road Patrol has as its chief duty to promote safety near homes and along the highways. (Ch. 115, Sec. 32, 33, 34, 35, 36.)
- (52) Fire drills required monthly in buildings that are more than one story high. (69-7.)
- (53) Instruction in fire prevention is required in elementary schools. (Ch. 115-62.)
- (54) Colleges required to give prospective teachers instruction in fire safety. (69-7.)

CERTIFICATION REQUIREMENTS FOR TEACHERS OF HEALTH

The minimum scholastic training represents graduation from a standard four-year college.

I. Professional Requirements.....18 Semester Hours

1. The Pupil..... 6
2. The School..... 6
3. Teaching and Practicum..... 6

(Must include at least 45 clock hours of actual teaching)

II. Academic Requirements. In terms of semester hours, the minimum subject matter credits for the teaching of health and physical education and health education are as follows:

History of diseases and immunization.

I. Area of Principles, Organization, Administration and Supervision.....6-10

- a. Principles of Health Education
- b. Principles of Physical Education
- c. Organization and Administration of Health and Physical Education.
- d. Evaluation and Measurement in Health and Physical Education.
- e. Curriculum in Physical Education

} may be combined

At least four areas must be included in this requirement.

II. Area of Applied Techniques.....10-12

- a. Methods and Materials in Group Games of Low Organization.
- b. Methods and Materials in Individual Sports (Tennis, Golf, Wrestling, etc.)
- c. Methods and Materials in Aquatics.
- d. Methods and Materials in Rhythms.
- e. Methods and Materials in Tumbling-Stunts.
- f. Methods and materials in Team Sports (Touch Football, Soccer, Speedball, Volleyball, etc.)
- g. Methods and Materials in Team Sports.
 - (1) Football
 - (2) Basketball
 - (3) Baseball
 - (4) Track

At least five areas must be included in this requirement.

III. Area of Individual Physical Education	4-6
a. Individual Physical Education (May include Kinesiology)	
IV. Area of Health Education	4-6
a. First Aid-Safety-Athletic Injuries	
b. Problems in Health Education	
V. Anatomy and Physiology	6
VI. Biological Science	6

**Part Time Teacher of Health and Physical Education
and Coaches of Athletic Teams 15**

This shall include:

a. Principles, Organization, Administration, and Supervision of Physical Education and Health	3-4
b. Physical Education skills and applied techniques	8-9
(1) Group games of low organization (games adaptable to adult groups and to children of elementary age).	
(2) Dual and single games (tennis, handball, golf, badminton, track, and field events, etc.).	
(3) Group games of high organization (football, soccer, rugby, basketball, baseball, volleyball, speed ball, lacrosse, field hockey, etc.).	
(4) Rhythms and dances.	
(5) Gymnastics and stunts.	
(6) Aquatics.	
c. Health Education, including the teaching of Health and School Health Problems	3-4

Health Education 24

1. The Individual	9-12
a. Personal Health	} May be combined {
b. Mental Health	
c. First Aid and Safety	
2. Community and School	9-12
a. Principles of Public Health	} may be combined {
b. Environmental Health	
c. Healthful Family Living	
3. Organization and Administration of School Community Health	3-6

TEACHER SCREENING AND OBSERVATION MANUAL

The way children "look" and the way they act tell a great deal about them. The classroom teacher is a key person in a strategic position to know how children act and look. The teacher can very quickly recognize when "Bobby does not look well" or "Peggy does not act like herself today." It is necessary for the teacher to know how a healthy child looks and how he is expected to act before signs of deviation from the normal can be detected.

"Some signs of health—The teacher knows that if a child is healthy:

1. He has an abundance of energy.
2. His eyes are clear and bright.
3. He is relatively well-coordinated for his age.
4. His posture and other body mechanics are reasonably good.
5. His hair is clean.
6. His skin is clear.
7. His muscles are firm.
8. His appetite is hearty.
9. He is not fussy about food.
10. He is free from all remediable disabilities.
11. He grows in weight and height in accordance with his age, body type, sex, and maturation level.
12. He is happy, and gets along well with himself and others.
13. He has purpose and a positive outlook on life commensurate with his level of maturity."¹

The teacher uses certain procedures in appraising the health status of boys and girls. These procedures help the teacher to *screen out* those children needing further examination or special teaching.

Screening tests are preliminary evaluations of vision, hearing and physical growth as indicated by height and weight.

Observation means continuous awareness of the child's appearance and behavior. It is the most important "tool" the teacher can use in health appraisal.

¹This list from Schneider & McNeely, *Teachers Contribute to Child Health*, U. S. Office, Bulletin 1951, No. 8.



Signs of health

Importance of Teacher Screening and Observation.

Through observations and screening test procedures the teacher can learn a great deal about the health status of boys and girls. Teachers and supervisors who have engaged in screening activities report that such screening helps them to know the health needs of their pupils. The information gained from screening was most useful in planning the total instructional program. Unless the teacher sees and understands that these procedures are useful in helping find the health needs, it may become just another chore and prove useless.

Over a period of years the point of view about teacher screening and observation has changed. At one time it was felt that only the physician could tell that something was wrong with the child. Later, it was thought that the nurse who visited the school was the person to do the screening. In more recent years it is recognized that the classroom teacher is in the best position to know when children deviate from normal, and that something is wrong. The teacher sees these boys and girls tired from play, rested at the beginning of the day, and in every situation throughout the day.

North Carolina has long recognized the teacher's part in screening as evidenced by the N. C. Public Laws which make it mandatory that teachers carry on these activities (General Statutes of North Carolina, Section 115-316).

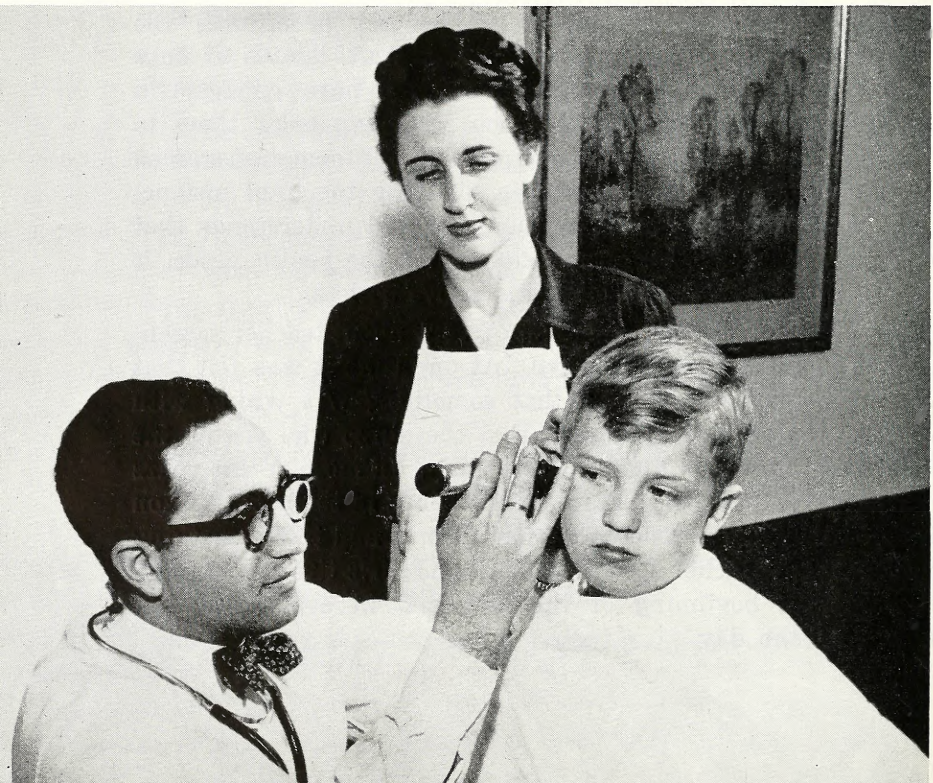
It must be emphasized that the teacher finds out only that something is wrong. The teacher DOES NOT diagnose. Only the physician can tell *what* is wrong and *what should be done* about it.

Purpose of this Manual.

The purpose of this manual is to give teachers, nurses and other school and health department personnel some techniques and procedures on:

1. Using screening tests.
2. Observing boys and girls for signs of deviation from normal growth and development.
3. Why and how to keep simple minimum records of pupil's health progress.

Only the physician can tell what is wrong



4. The importance of and how to plan and carry on teacher-nurse conferences.
5. Referral and follow-up activities.

Planning

Policies concerning teacher screening and observation should be worked out as a part of the county-wide or city-wide planning for the total health services program. These policies should then be used as a guide for each individual school in planning for screening and observation activities.

Teacher-Nurse Conferences.

Since the teacher and nurse work more closely together than most other persons in the school health service program, they should plan together the screening and observation activities. These planning conferences may include just one teacher and the nurse or a group may meet with the nurse at the same time.

Decisions will need to be made about many things, including:

1. How often the nurse will visit the school.
2. How the teacher will notify the nurse that her services are desired.
3. How the teacher should refer children to the nurse.
4. Where and at what time the teacher and nurse may have a conference.
5. How to arrange for teachers to get help with the screening procedure.
6. What information is to be recorded and who will make such recordings.
7. What time is best for the teacher to have completed her first formal screening activities.

When the teacher has learned something about the children in the group and has completed the "first screening activities," a conference should be arranged with the nurse. At this conference there will usually be many things to talk over, such as:

"Johnny seems to be very timid. I wonder if he is ill."

"Alice limps when she walks."

"Tommy reads only 20/40 on the Snellen E Chart."

"Twenty of my pupils have obvious dental defects."

In most cases the teacher will want the nurse to see these children.

What is the *best time* for teacher-nurse conferences? (No one seems to have found a *best time*.) The nurse and teacher, with the help of the principal, should work out the time and select a place that is most satisfactory in each particular situation. Planning should be done so that the time will be spent most effectively.

Listed here are a few suggestions for planning and carrying on a teacher-nurse conference:

1. Decide on the time and length of the conference.
2. Select the place.
3. Be prompt.
4. Decide what is to be discussed at the conference and in what order. For example, discuss in the following order:
 - a. Health guidance of all children.
 - b. Those children who seem to have the greatest need.
 - c. Review past records.
 - d. Records needed this year.
 - e. Encourage parents to take children to family physician.
5. Keep notes on what is decided. Some notes will be made on the child's screening card or other individual health record kept by the teacher. Teacher should file any other notes that were made during the conference and have them at hand for the next planned conference or for other reference.

THE "NORTH CAROLINA TEACHER SCREENING AND OBSERVATION RECORD."¹

This record card is designed to serve as a guide to aid the teacher with screening and observation activities and in determining the health progress of boys and girls. It was developed cooperatively by State and local school and health department personnel.

Every teacher observes the pupils in one way or another. Without the use of some system or guide, it often happens that some pupil with a defect is overlooked. The use of this guide (or a similar one) will help the teacher to make sure that most of the children with special problems and needs are found.

The front of the card

The statement "To be used in the classroom during the year and filed with the permanent records in cumulative folder each

¹See reproduction of this card at end of this Manual.

spring," emphasizes the need for the teacher to use these record cards in the health work with the boys and girls during the entire year. Unless the teacher has these records readily accessible, they will not be used to the best advantage. They should be used in the classroom during the year, and then filed with all other records of the pupil at the end of the school year. At the beginning of the next school year the teacher may pull the record cards from the cumulative folders and use them in the same manner as the year before.

General Information.

Is all the general information (parent's name, occupation, etc.) needed on both the cumulative folder and on the "Teacher Screening and Observation Record?" Each local administrative unit should answer this question in accordance with the local needs and situations. Care should be taken to avoid copying information from one record to another, unless it is essential. Equal care should be taken to be sure that information is copied or recorded in all places necessary to make it most usable.

History of disease and immunization.

Record the year the child had the disease, if known. If year is not known, indicate that the child has had the disease. If child has not had the disease, leave the space blank.

Record the year the child had his first immunization series, if known, and the latest date the child has had an immunization. For example, a child entering school in 1953 may have had his first series against diphtheria in 1948 and his latest booster in 1953. This would be recorded in the appropriate spaces on the record form. If he has not had any other immunization against diphtheria, all other spaces for diphtheria would be left blank.

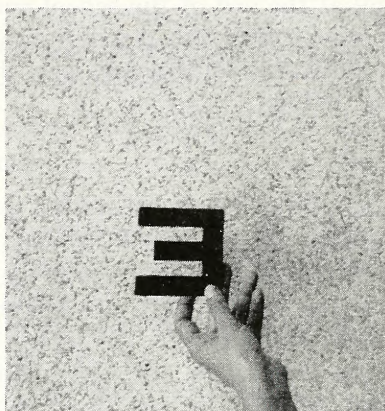
Date, age, grade.

These blanks are to be filled in with the date of the current school year, the present age of the pupil, and the grade to which he is assigned.

Screening tests.

Space is provided here for four screening tests. The teacher is expected to use three of these: The Snellen test, height, and weight. The audiometer test is usually done by a special teacher, the nurse, or a person especially employed to do this work.

The Snellen "E" Chart is preferable to the letter symbol chart, because the symbols are all exactly alike and it can be used with children who can't read as well as those who can. If a paper chart is used, attach it securely to a cardboard so the edges will not roll.



The legs of the E point to the left

PROCEDURES FOR TESTING EYES

a. *Place the chart on the wall.*

- (1) In the best light possible, away from the window, on a bright day, with as little glare as possible.
- (2) With the 20/20 line on the level with the eyes of the pupils to be tested.
- (3) 20 feet away from where the pupils will stand to read it.
- (4) Fastened on wall securely at top and bottom. *Note:* The chart should not be left on the wall when not in use.

b. *A cardboard window.*

A piece of cardboard with a window (square hole) may be used to place over the chart so that only the one symbol you expect the child to read at that time will show. The use of the "window card" will insure a more accurate test, especially for young children or for those who may have memorized the chart.

c. *Card to cover eye.*

Each child may be supplied with a clean card to cover his eye not being tested. A clean sheet of notebook paper properly folded may serve very well in place of the card.

d. *Before the test is begun.*

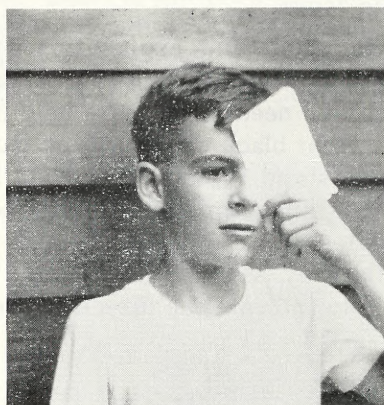
Give a demonstration and explanation of what is to be done to be sure that each child understands the procedure. Primary children will need much more help in understanding. A large "E" cut from black cardboard or paper may be used to help them understand the direction the "legs" of the "E" point. The teacher and pupil may decide together how the pupil will let the teacher know when he sees the symbols correctly. The child may say "to the door," "down," "to the window" or "up" to indicate the direction the legs of the "E" point.

e. *The test.*

The pupil stands 20 ft. away from the chart. If he wears glasses, test him with the glasses on first, then have him remove his glasses and wait several minutes before testing without them. Have pupil cover his left eye by placing the folded paper or card lightly against his nose. Keep both eyes open and do not press the card against the one not being used. Use the cardboard with the window (or use a pointer) to indicate the symbol you wish the child to read. Start with the 20/20 line. If the pupil reads all of the symbols on the 20/20 line, write the result in the proper space on the card. If the pupil fails to read the 20/20 line correctly, go up the chart (20/30, 20/40, etc.) to find a line he can read correctly with ease. Repeat the 20/20 line. Record as his score the *lowest* line he read *correctly*. (Test the left eye in the same manner.)



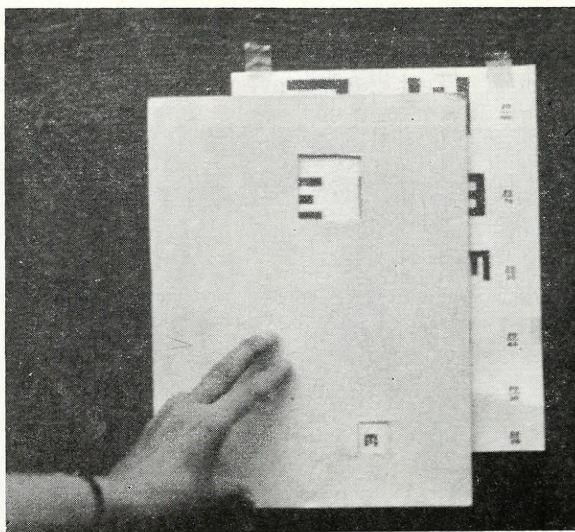
Test with glasses on first



Remove glasses, wait several minutes, and test without glasses

Refer those pupils who read 20/40 or above to the nurse unless otherwise instructed.

IMPORTANT. The Snellen test is only one screening device used to determine whether children can see a standard size symbol at a distance of 20 ft. It does not test for farsightedness and those who have difficulty seeing close up.

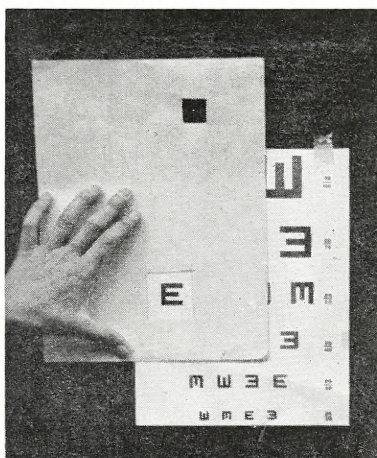


Start the test with the 20/20 line

AUDIOMETER TEST RESULTS

Details for testing, scoring and record keeping are contained in the publication, "School Hearing Conservation Program," State Department of Public Instruction and State Board of Health, Raleigh, N. C.

When the pupil has an audiometer test (which will not be every year unless he has defective hearing), check the disposition made of the case. For example, if his hearing is good, check (✓) in the column headed "OK." A check (✓) in the column headed "Retest" means that the pupil should have another test in from 6 months to a year. If it is recommended that he see the doctor, check (✓) in the column headed "Refer to Doctor." A detailed record of defective hearing will usually be included as a part of pupil's school records.



If the child fails to read the 20/20 line, move up the card to find a line he can read

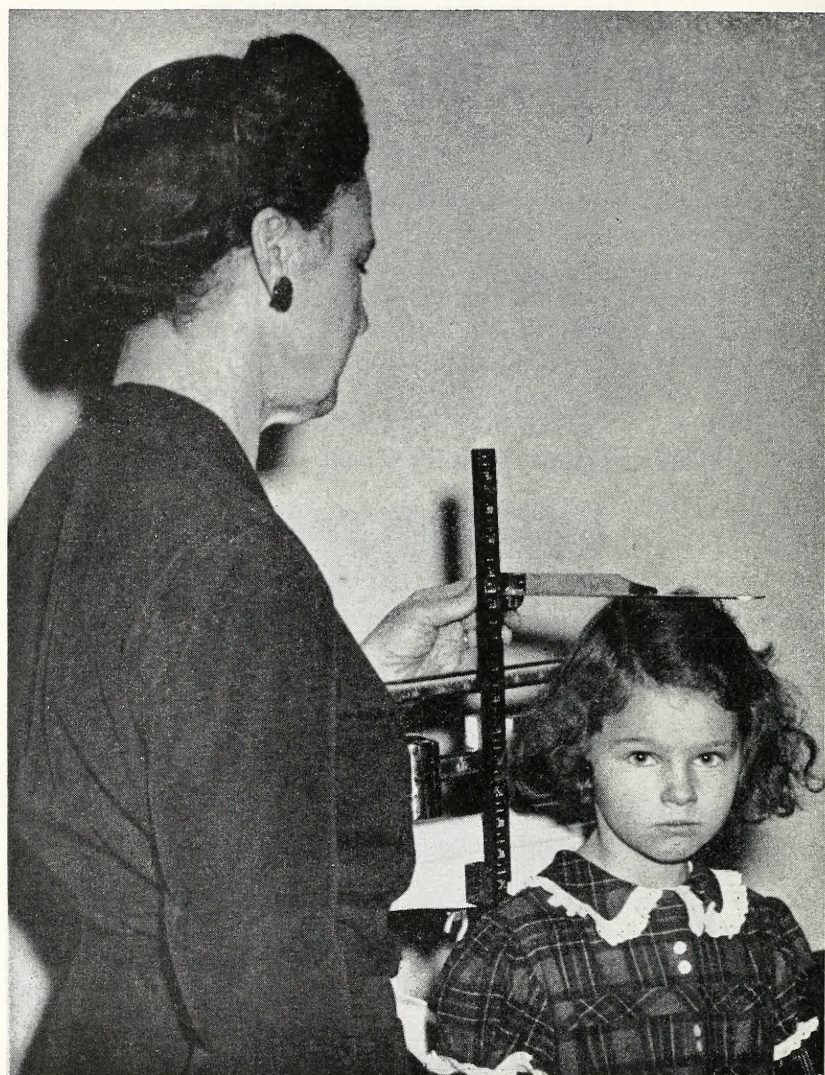
HEIGHT AND WEIGHT

The chief reasons for measuring height and weight are:

To promote interest in growth and health.

To find any pupils who have failed to gain weight over a three month's period during growing years which may indicate poor health practices or illness.

To find those pupils who are much "overweight" or "underweight" which indicates that something may be wrong.



Measuring height

Measuring Height.

Use the measuring rod attached to the scales when one is available in the school. When not available, a measuring device may be improvised by attaching a yardstick properly against the wall. Newspapers should be provided to protect feet against soiled floors. Height is usually measured twice

during the school year in accordance with the following procedure:

1. Pupil removes shoes (measure children, not shoes).
2. Pupil stands tall with heels, buttocks, shoulders and head touching upright surface.
3. The figure shown by the indicator is recorded in the appropriate space on the record card.
4. To determine height on the improvised measuring device, place a box or book with the long side touching the



Using an improvised measuring device to determine height of pupil



Pupil stands quietly on center of scales

ruler above the head and slipped down to rest upon the top of the head. The height is indicated by the figure at the lower edge of the box or book.

Weighing.

Weighing and measuring height are usually done at the same time to avoid too much "taking off shoes." Always announce this activity the day before it is to be done. The following procedure is recommended:

1. Use dependable, correctly balanced scales.
2. Place scales in good light.
3. Have pupil remove shoes and heavy coat.
4. Have pupil stand quietly on center of scales.
5. Record weight in pounds and fractions; for example, $64\frac{1}{2}$ lbs.

Other Tests.

The results of any other test made as a part of the school health program should be recorded in the column headed "Other Special Tests" if it is determined that the information is essential for the teacher.

Teacher's Name.

The classroom or home room teacher's name should be signed each year.

Comments and Recommendations.

The teacher should record any recommendations or comments made by medical or health personnel which are useful to the teacher in doing the best job of guiding and teaching the pupil. These comments are usually not recorded by the physician himself. The teacher gets this information from the nurse, parent, the physician, psychologist, dentist, through conference, by being present at an examination, etc., or from some record made by the physician or dentist.

**TEACHER OBSERVATIONS (THE REVERSE SIDE
OF THE RECORD)****Marking.**

Only two symbols are listed here for marking. This is an attempt to keep the record simple. "X" indicates the teacher thinks something is wrong. A circle around the "X" indicates that something has been done about it or is being done about it. *Note.* If it seems necessary to show something else about the condition, feel free to write a note on the card or write a note and attach it. This is intended as a work card and should be used in whatever way seems best to improve the health of the boy or girl.

Years in school.

This indicates the *year in school* and *not the child's grade*. For example, a pupil who has repeated one grade will be in his *5th* year in school when he is in the *4th* grade. The grade may be indicated in the space along with the year in school if it will be helpful.

General observations.

By observation the teacher detects signs of defects or signs which indicate deviations from normal behavior. The child who is not like himself or who is very different from pupils of his group, usually needs attention. For example, when a child seems to be very much fatter than the other pupils in his group,

the teacher puts an "X" after "very fat" in the column for that year in school. The same would apply to the other conditions. The teacher *DOES NOT diagnose*, but only finds that something seems to be wrong. The physician is the person who can tell what is wrong and what should be done about it.

Parents are also encouraged to observe the child for any signs of illness and to *keep him at home when he is ill*.

Behavior.

The conditions listed in this section *may* indicate mental and emotional deviations. Where teachers notice other behavior symptoms, they should be written in the line marked "other." These conditions if sufficiently prominent suggest that the pupil should be referred through the nurse and/or school physician to the family physician so the services of a psychologist or psychiatrist may be secured if indicated. However, *the teacher and nurse need to know what behavior is expected of boys and girls at different age levels so that normal behavior will not be labeled as signs of mental or emotional problems.*

Eyes.

In addition to the Snellen "E" test, described above, the teacher may observe one or more of the conditions listed below as signs of eye difficulty or defective vision.

Psychological services



Styes or crusted lids.
Crossed.
Squints or frowns.
Holds book very close—or very far.

Ears.

The conditions listed here are significant indications that the child needs attention.

Discharge.
Earache.
Turns head to side.

Mouth and teeth.

The teacher can find only the most obvious defects in teeth. The dentist is the only person who can find all dental caries. Pupils should visit the dentist regularly—twice a year preferable.

To inspect mouth of pupils:

Have pupil face the light.
With his own hands have pupil pull lip down to expose gum.
Pupil open mouth wide to expose teeth and inside of mouth.
Record any deviations from normal observed.

Close observation of the pupil during casual conversation may be all that is necessary to find out that something is wrong.

Nose and throat.

The teacher is not expected to look at the tonsils as a regular part of observation. There are certain conditions which the teacher can observe that may give some indication of throat or nose trouble, such as:

Persistent mouth breathing.
Frequent sore throat.
Frequent colds.
Persistent cough.
Constant clearing throat.
Absences from school due to colds.
Earache.
Speech defects.

Skin and scalp.

Any rashes on the skin or scalp are indications that the condition needs attention. Observations of the skin and scalp can usually be done informally. Where there seems to be a need for close inspection, have pupil stand with his back to the light. In this position the teacher can observe back of neck for swollen glands, any sores behind ears, condition of hair, especially around

the neck and ears, and any need for improvement in personal care. Girls can assist by holding hair high off the neck with their hands.

Orthopedic.

Signs of orthopedic and postural defects may be observed while pupils are sitting, standing in line for lunch, during the physical education class, and at other times when the child is not conscious he is being observed for posture. The way he wears down his shoe heels or "runs his shoes over" may indicate a foot or leg defect, or a poor practice of walking. Anything different in the way pupils walk, skip or run should be noted and followed up.

Number of Days Absent Due to Illness.

At the end of the school year put in this space the total number of days the pupil was absent on account of his own illness.

WHAT TO DO WITH WHAT IS FOUND

Follow it up.

Try to get something done about what was found during the screening and observations. Try to get something done about what the doctor recommended. Here are some things which may be done:

1. Talk with the nurse about the needs of individual boys and girls in the group.

The nurse will help select those to be referred



2. Use the information to help plan the health instruction program.
3. Help pupils to change their health habits when there seems to be need for improvement.
4. Encourage pupils to visit the dentist and family physician.
5. Help nurse select those to be referred for health examinations (to the family physician) to the clinic at school, or the clinic at the health department. The number selected for referral may depend on the amount of services available in the local town or county.
6. Talk with parents of younger children about their problems and needs. This may be done at a conference arranged at school or through home visits. Some cases may take a lot of encouragement and many home visits by teacher and nurse.
7. Help parents locate resources for financial help when needed. (For sources of funds see "Organization and Administration" and "Community Health" sections.)
8. Help parents locate services.
9. Encourage and help pupils do what the physician recommends. Follow up activities are time consuming, but no child can maintain and improve his health or do his best work when he has physical and emotional problems. Time spent by the teacher in health guidance of individual pupils is often the most effective health instruction.

Records.

Records are essential to a good health program.

The teacher is responsible for keeping records up-to-date for the school and the nurse is responsible for keeping those needed by the health department. However, together they may decide who is to record what on each record. Many schools have found that they can eliminate some duplications in record making by doing some planning together. For example: At the pre-school clinic (or at any school health examination) the physician's findings may be recorded in the proper space on the child's cumulative folder. Starting the cumulative folder at the pre-school clinic will save the teacher having to copy all this information at the beginning of school. The teacher should see that the folders are ready for use by the physician and nurse. Any information needed by the nurse to follow up any of the findings

NORTH CAROLINA CUMULATIVE RECORD-

XIV. SCHOOL PHYSICAL EXAMINATION

[illegible]

"North Carolina Cumulative Record"

of the examination may be copied from these folders. The teacher or a volunteer (parent or high school student) may make copies as directed by the nurse, or the nurse may wish to copy the information. Some health departments use the school card for this purpose, some departments use a "scribble sheet," and some nurses make notations in their books.

The nurse should help the teacher interpret the records. The teacher and nurse should share information regarding corrections and medical treatment to insure accurate recording.

After follow-up is completed, information should be recorded on the child's cumulative folder at school and in the family

folder at the health department if a family record is being kept. No other duplicate of the school medical services is necessary in most cases.

The school health records may be very useful in helping the school and health department evaluate the school health program, and for health guidance of the individual boy or girl.

In brief, each child's school health record should include:

1. Information obtained through screening tests and observations.
2. Information from the examination by the doctor, dentist, and other personnel, conducted as a part of the school program.
3. Information from any special tests or examinations not generally included in the usual school health examination.
4. Reports and recommendations from the family physician essential to the teacher or nurse in working with a particular boy or girl.
5. A record of what has been done about any conditions found (correction, under medical care, change of practices).
6. Any anecdotal records or other notes by teacher, nurse, or other personnel which have importance in the health guidance of the pupil.

Records in the Health Department.

Each local health department should decide what records of services to school children are needed in the health department.

School Health Examination (Services by the physician and dentist).

Only a brief discussion is included here, since a more comprehensive explanation is included in the section "School Health Services" in the Health Education Bulletin.

After the teacher and nurse select the pupils to be referred for examination, arrangements may need to be made for the examination at school. The following should be considered as important in preparation for the examination:

1. The physical arrangements for the examination will depend upon the local situation. These examinations are usually conducted in the health room where the school has this facility. (See "Suggestions for planning the Preschool Clinics and Conferences," pp 150-156 in the *Handbook for Ele-*

mentary and Secondary Schools, for specific suggestions of things needed to carry on examinations at the school clinics.)

2. The cumulative school record folders should be ready for use by the physician. Also, some physicians desire to have the teacher's screening records for use during the health examinations. These should always be available to the physician.
3. Parents of elementary age children should be invited and urged to attend the examination of their child. Parents of elementary age children who cannot attend should be notified by letter of the findings and physician's recommendations, and/or home visit by nurse and/or teacher. Parents of high school pupils should be notified when it is considered that a conference with the pupil himself would not be sufficient.
4. Parents, pupils, and medical personnel should be encouraged to report to the teacher any medical treatment and corrections done in response to a notification from the school. It is important that records be kept up-to-date to prevent unnecessary effort by the teacher or nurse when correction has already been completed.

Summary Reports and Evaluation.

Most schools find it extremely helpful to make a summary of their health service work. For example, the *teacher* (in consultation with the nurse in most instances) should make a summary of the work done in her grade or home room of the number of defects corrected, the number under medical care, the number still needing treatment or corrections, etc. The *principal* in turn should make a summary of the teacher's reports and send a copy to the superintendent. From these the *superintendent* can easily summarize the work for the entire unit. This takes time, but it is certainly important in evaluating and may be useful in securing financial support for the health program.

Any record form selected for use or developed by a county may be used. A form is available from State Department of Public Instruction and State Board of Health.

From time to time certain reports are requested by the State Superintendent of Public Instruction or the State Health Department.

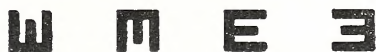


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Any summary reports could be used for evaluating the program. Evaluation should go on continuously during the year, during the teacher-nurse conferences, on a home visit, etc. There should be a "summing up" and "talking over" period by the same group who participated in the planning. Evaluation of one year's work should be the beginning of plans for the next year.

NORTH CAROLINA TEACHER SCREENING AND OBSERVATION RECORD

(To be used in classroom during the year and filed with permanent records in cumulative folder each spring.)

Name _____ Date of birth _____ Sex _____ Race _____
Last First Middle Mo. Day Year
 Address and/or directions to home _____ Phone _____
(in pencil)
 Parent (or guardian) _____ Address (if different) _____
(in pencil)
 School _____ Family Physician _____ Dentist _____
(in pencil)
 Pupil lives with: Father & Mother _____, Father _____, Mother _____, Other (specify) _____

Pupil has had—give date (year)	Pupil has been immunized against—give latest date (year)			
	First series	booster	booster	booster
Rheumatic fever _____				
Whooping cough _____				
Measles _____				
Other _____				

Date	Age	Grade	Snellen Eye Test				Audiometer Test Results (Check)			Height		Weight			Other Special Tests (Write in)	Teacher's Name
			With Glasses		Without Glasses		OK	Retest	Refer to Doctor	Sept.	May	Sept.	Jan.	May		
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			20 /	20 /	20 /	20 /										
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			2													

Comments and recommendations by nurse, physician, dentist, teacher, psychologist or other special personnel. Give date, name and title of person making comment.

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Wheatly and Hallock, *Health Observation of School Children*.
McGraw-Hill Book Company, Inc. New York. 1951. \$4.75.

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1. McNeely and Schneider. *Teachers Contribute to School*

TEACHER OBSERVATIONS

Directions: 1. Put an X after the item when there seems to be deviation from normal or a defect.
2. Circle the X (X) when the defect has been corrected and/or the pupil is under medical care.

	YEAR IN SCHOOL	1	2	3	4	5	6	7	8	9	10	11	12	13	14
General	Does not look well (physically)														
	Very fat														
	Very thin														
	Tires easily														
	Posture seems poor in general														
	Lacks appetite														
	Frequent headache														
Behavior	Other														
	Very withdrawing—seems afraid or shy														
	Cries easily														
	Usually gives in (submissive)														
	Fails to play most of the time														
	Often very restless														
	Daydreams excessively														
	Very inattentive														
	Very hostile and/or destructive														
	Excessive bragging														
	Irritable—most of the time														
	Excessive use of the toilet														
	Bites nails or chews objects														
	Usually does not get along with others														
Eyes	Has many accidents														
	Stutters or other speech defect														
	Other														
	Styes or crusted lids														
	Crossed														
Ears	Squints or frowns														
	Holds book very close—or very far														
	Other														
	Discharge														
	Earache														
Mouth Teeth	Turns head to side														
	Other														
	Obvious cavities														
	Obviously irregular														
	Need cleaning														
Nose Throat	Inflamed gums														
	Other														
	Persistent mouth breathing														
	Frequent sore throat														
	Frequent colds														
Skin Scalp	Persistent cough														
	Constant clearing the throat														
	Other														
	Rashes or sores														
	Extremely rough and dry														
Orthopedic	Other														
	Chronic limp														
	Toes pointed in or pointed out														
	Stiff or swollen joints														
	One shoulder higher than the other														
	Holds head to side habitually														
	Other														
	Number of days absent due to illness (record at end of year)														

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